PUNJAB ADMINISTRATION REPORT

1907-1908

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PUNJAB ADMINISTRATION REPORT,
1907-1908.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1907-1908.

LAHORE:
PRINTED AT THE PUNJAB GOVERNMENT PRESS,
MCMIX

CHAPTER V.—REVENUE AND FINANCE.

CHAPTER VI.—VITAL STATISTICS AND MEDICAL SERVICE.

CHAPTER VII.—INSTRUCTION.

CHAPTER VIII.—ARCHÆOLOGY.

CHAPTER IX.—MISCELLANEOUS.

MAPS.

[Number of pages fixed as the maximum limit of the Report : Part I, 20—30 pages ; Part II, 150 pages.]

REPORT

ON THE

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PUNJAB AND ITS DEPENDENCIES

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1907-08.

PART I.

GENERAL SUMMARY.

(The "year" throughout this report is not invariably the financial year ending 31st March 1908. At the heading of each chapter, with the exception of chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March 1908, in chapter II it is the revenue year ending 30th September 1907, and in chapters III and VI it is the calendar year ending 31st December 1907.

The Administration Report for 1901-02 was a decennial report, and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.)

CHANGES IN THE ADMINISTRATION.

Personnel of the Administration.

1. Sir Thomas Gordon Walker, K.C.I.E., C.S.I., officiated as Lieutenant-Governor from the 22nd of May to the 11th of August 1907, inclusive, during the absence on leave of Sir Denzil Charles Jelf Ibbetson, K.C.S.I. Sir Thomas Gordon Walker again assumed charge as Temporary Lieutenant-Governor on the 23rd January 1908, relieving Sir Denzil Charles Jelf Ibbetson who retired from the service. It has, with the deepest regret, to be recorded that Sir Denzil Ibbetson died in England within a month of his retirement.

RELATIONS WITH TRIBUTARY STATES.

Political.

2. The most important events of the year were the marriage on the 9th March 1908 of Maharaja Bhupindra Singh of Patiála to the daughter of Sardar Gurnam Singh of Sangrúr and the formal recognition in Darbar on

the 15th May 1907 of Nawab Sadik Muhammad Khan, Abbasi, V, of Baháwalpur. The administration of the States proceeded smoothly on the whole except in Suket where the friction between the Raja and his officials continued.

ADMINISTRATION OF THE LAND.

Land revenue.

3. The year 1906-07 was on the whole satisfactory from an agricultural point of view. The area sown was 9 per cent. above normal, but the outturn of the principal staples was somewhat disappointing. Some damage was done to cotton by the boll-worm, and the wheat harvest, which at first promised to be excellent, was blighted by untimely rain. The collections of revenue were good, 97·4 per cent. of the fixed land revenue demand being collected. The recent quinquennial analysis of agricultural statistics has shown the history of the past five years to be one of general progress in the extension of cultivation and of irrigation, and a noteworthy feature has been the increase of fluctuating as compared with fixed land revenue. The latter is now 2¾ lakhs less than it was in 1901-02, while the former, which then stood at 10½ per cent., is now 18¾ per cent. of the whole demand; this result is largely attributable to the extension of canal irrigation.

Surveys and settlements.

4. The conclusion of settlement operations in Hazára completes the settlement work in the North-West Frontier Province for which the Punjab Settlement Department was responsible. Otherwise there has been nothing remarkable in the administration of the year. In the making of village maps, particularly in avoiding cumulative errors, the work done by the Survey Department in traversing large areas and laying down base lines at intervals is likely to be of the greatest value.

Land Alienation Act.

5. In last year's report it was noted that, for the first time since the passing of the Land Alienation Act, a part of the province had been exposed to famine conditions, but that the contraction of credit which resulted had not been sufficient to unduly embarrass the cultivator; in other words, that the Act had justified itself even in a year of scarcity. In the present year the Financial Commissioner has taken the occasion to review the working of the Act since it came into force. The conclusions arrived at have been stated in the body of this report, and are in general that the Act is universally popular among agricultural classes and that it has had the effect of very materially reducing the transfers of land into the hands of the non-agricultural community. In the words of the Financial Commissioner the Act "has earned the universal approval and gratitude of the hereditary landowners of the Punjab, some three millions in number, and has shown them that Government sympathises with their dearest wish, which is to hand on their ancestral land to their children's children." On the other hand, it appears that the non-agricultural classes have little difficulty in finding profitable investments for their capital in other directions, as in the purchase of town lands, in the distribution of produce and in the establishment of markets and factories. The income-tax returns afford no reason for supposing that their net profits have been seriously reduced.

Court of Wards.

6. Turning to the working of another piece of "paternal" legislation, the Court of Wards Act, the results are found to be equally satisfactory. During the year the estate of Kot Shera was released; it had been for 19

years under the management of the Court of Wards and when taken over was burdened with debt to the extent of Rs. 21,592. This debt was entirely discharged, numerous improvements were made in the property, additional lands of the value of Rs. 45,000 were acquired and a surplus of Rs. 37,384 was handed over to the ward who is now an Honorary Magistrate and Zaildar (circle headman). Similar progress has been made in the case of other estates.

Registration and land records.

7. During the last nine years there has been a very remarkable fall in the registration of optionally registrable deeds. There has not been a diminution of small transfers of rights of land, and as these transfers are largely made on account of deeds which are optionally registrable, the conclusion is that more trust is placed in the revenue mutation records. This fact is interesting in itself as evidence of an increased sense of security, and it also indicates the possibility of some simplication in the process of registering compulsorily registrable deeds. At present, if a right in land of over Rs. 100 in value is transferred by purchase, etc., the transfer has to be recorded in the revenue records and the deed has also to be registered separately.

Colonies.

8. In the Administration Report for 1901-02 an account was given of the wonderful development of the colonies started by Government, and they have continued to develop since then. The inability of the railway administration to cope with the grain traffic, while unfortunate in itself, is at the same time an index of the rapid growth of traffic in the Chenab. Allotment of lands in all the colonies has now almost been completed, and an area of over $2\frac{3}{4}$ million acres, nearly all of which is culturable and irrigable, has been allotted, markets and roads continue to progress, and the system of grants-in-aid and rewards for sanitary improvements seems to be providing a stimulus to cleanlier habits in villages. In this connection it is interesting to note that the Janglis (the original nomadic inhabitants of the tract) obtained 8 of the 20 rewards distributed. In connection with the fact that, as noted in last year's report, a Bill for the administration of the colonies raised opposition and was vetoed by the Governor-General in Council, a Commission was appointed in October 1907 to inquire into, and report on, numerous matters of administration. The Commission submitted its report in April 1908.

During the year there has been nothing very remarkable to record as regards administration, but the increased cost of labour has become a serious problem. Although in some of the more remote parts of the Punjab customary rates of wages still prevail, yet there has been a steady rise in the wages of unskilled and skilled labour in most districts, and this rise has become more accentuated in recent years owing to the ravages of plague. The fact has been frequently noted in the departmental reports and the state of affairs compared to the economic revolution which took place in England after the Black Death. In Amritsar district the average wage in 1883 of an able-bodied agricultural labourer was Rs. 6 per mensem and that of a common mason, carpenter, or blacksmith Rs. 12·62; in 1893 these figures had risen to Rs. 7 and Rs. 14·5, respectively; in 1903 to Rs. 8 and Rs. 15; and in 1907 stood at Rs. 8 and Rs. 25. In the colony districts, owing to rapid development and also to the partial absence of customary wages, the increase has been even more marked, and at harvest time even boys were refusing 12 annas a day. This, perhaps, is abnormal, but is serious and the experiment of introducing reaping machines, adverted to in the body of this report, will be watched with interest.

PROTECTION.

Police and criminal justice.

9. The year has been a normal one except as regards the period of political unrest in the early summer of 1907 which manifested itself in riots at Lahore and Káwalpindi, in seditious articles in certain newspapers, and in more overt acts calculated to discredit Government, such as the fouling of wells. The unrest was due partly to the prevalence of plague and high prices and partly to agitation against certain measures of Government, such as the Colonization Bill (referred to in paragraph 46 of last year's report) and the proposed enhancement of the occupiers' rates on the Bari Doab Canal. It was found necessary in May 1907 to deport two of the agitators under Regulation III of 1818. As a result of this measure, of prosecutions in connection with the riots, and of legislation dealing with public meetings of a seditious character, the feeling of unrest had by the autumn considerably abated, in November the deported agitators were released, and it was decided that the Seditious Meetings Act (No. VI of 1907) should not be applied to this province. In the more normal kinds of crime there was neither a substantial increase nor decrease, and the percentage of convictions remains much the same. A satisfactory feature of the year's administration has been the continued and increased co-operation between the police of different districts and of Native States and the aid rendered by Honorary Magistrates and Zaildars (circle headmen).

Prisons.

10. Passing from what may be termed the objective to the subjective treatment of crime, the most noteworthy feature is the increased attention which is being paid year by year to the separation of habitual from non-habitual criminals and also to the reform of youthful criminals. The present prison accommodation in the Punjab does not permit of that complete segregation which is desirable to prevent the contamination of the non-habitual classes, but this is done to some extent and is helped by an increasing use of fines as a means of punishment in such cases, or by release on security under the provisions of section 562 of the Criminal Procedure Code. The numbers in the Reformatory School at Delhi also continue to increase. A great improvement in this respect will be made when the Ludhiána Central Jail is constructed, but this scheme is estimated to cost some eight lakhs and accordingly has had to be postponed.

Civil justice.

11. The number of matrimonial and guardianship cases (Act VIII of 1890) continues very high, and the amount of time which District Judges require to spend over the latter is a serious problem. During the year there has been a satisfactory improvement in the execution of decrees, probably due to the instructions issued by the Chief Court to ensure the methodical distribution of execution cases.

LOCAL SELF-GOVERNMENT.

District boards and municipalities.

12. The advance of local self-government is slow, and the direction of the activities of many local bodies, if not the activities themselves, continues to depend largely on the inclination and zeal of the local officials. The difficulties in the way, such as indifference to, or corrupt practices at, elections, diffidence in differing from officials, etc., have been dealt with in the decennial Administration Report for 1901-02. It has been proposed that monthly meetings should be held in every district so as to secure the more efficient discharge of executive functions. There are, however, some signs

of awakening interest in members of boards towards their duties and responsibilities, and one of these is the progress which is being made in the pushing on of public works, the construction of schools and hospitals, and the improvement of roads.

Another sign is increased efficiency of sub-committees, and in this connection it has been remarked that "the utilization of sub-committees imbued with a due sense of practical responsibility must become a more prominent feature of municipal administration if the latter is to discharge its functions in an adequate manner."

The number of provident funds continues to increase, and it is hoped that in time these will become universal; by means of them an improvement in the status of municipal and district board employees should be effected and an encouragement to long service given. The model rules framed by Government have been generally approved, with the exception that it has been found desirable that local bodies should contribute cent. per cent. with the subscriptions of their servants; the original rules merely provided for a 50 per cent. contribution.

The system of each religious community electing its own representatives has been extended to Rewári and Ambála, so as to equalize the number of Hindu and Muhammadan members of the committees. This system, where it has been tried in the Punjab, has proved popular and successful, as it removes a frequent cause of friction and secures the representation of minorities.

In taxation there has been no remarkable change, and a substitute for octroi that will meet the conditions of the province has still to be devised.

AGRICULTURE, WEATHER AND CROPS.

Operations of the Department of Agriculture.

13. The Agricultural College at Lyallpur has not yet been opened, but will be opened from 1st July 1909. The staff of European experts is now complete, and experiments have been made, which have already led to results of some importance. Progress is being made in the introduction of agricultural machinery suitable for the Indian farmer.

The Veterinary Department.

14. A change has been made in the administration of the veterinary department, by which there is only one man itinerating in each district, while the rest are stationary in the hospitals. The year, owing to drought, was a particularly healthy one for animals, though their condition was not so good as it should have been. The supply of green fodder was small owing to the poor agricultural conditions.

Agricultural pests.

15. Boll-worm was extremely rare, but the study of the worm and its parasites is being continued.

Loans to agriculturists and co-operative credit societies.

16. Loans made by Government were much less than in the previous year. But in the two years preceding the one under report abnormal agricultural conditions and the Kángra earthquake necessitated large loans by Government. Recoveries of the loans are being duly made. At the same time substantial progress is being made in co-operative credit societies. Their assets have risen from $2\frac{3}{4}$ to $5\frac{1}{4}$ lakhs of rupees, and the amount of capital out on loan to members is twice as great as last year. It speaks well for the enterprise and prosperity of the Chenab colonist that better progress was made in Lyallpur than in any other district.

Prices.

17. Prices rose rapidly with the failure of the monsoon and the active demand for grain in the United Provinces, and the surplus grain of the province was disposed of at very high prices.

Weather and crops.

18. The features of this year were the premature termination of the monsoon, the late arrival and inadequacy of the winter rains, and the drought of February and March. A serious shortage of water was recorded in all the canals. In the autumn crop the normal area was placed under cotton, as there was little apprehension of a recurrence of boll-worm. The spring crop of 1907-08 was much smaller than in the previous year, in all districts, as the sudden termination of the monsoon left the soil too dry for sowings on unirrigated land, and caused a short supply in canals.

FORESTS.

Management.

19. The area under the management of the Forest Department shows a slight increase, but the work was hindered by drought. The difficulty of protecting forests from damage by sheep and goats is growing more marked.

Explcitation and financial results.

20. There is still a shortage of railway wagons and it is being found advisable to extend the use of purchasers' agency in the case of wood sold. The total revenue shows a decrease, but this is attributable to the retrocession of the Chamba forests.

MINES AND QUARRIES.

21. The province is unable to supply more than a small part of the coal used by the North-Western Railway.

MANUFACTURES.

22. The total number of factories has increased from 235 to 253. The number of gins has outrun the available supply of cotton, but flour and rice mills are also becoming popular. The general condition of the factories is good. An interesting monograph published during the year shows the state of iron and steel industries in the Punjab.

TRADE.

Trade in India.

23. Exports show an extraordinary increase, representing not so much the agricultural conditions for the province as a whole, as the great demand for food-grains in the United Provinces and Bengal. In spite of the bad harvests, the wheat export reached nearly one million tons. Imports also show a large increase, the most striking being in European cotton piece-goods which increased by 143 lakhs, while Indian goods showed a decrease of 64 lakhs.

Trans-frontier trade.

24. The change in the methods of registration of the trans-frontier trade forbids any real appreciation of statistics. Trade with Tibet and Ladákh cannot grow unless the roads, bridges and serais are much improved.

JOINT STOCK COMPANIES.

25. The number of companies has increased, as well as their capital, both nominal and paid-up.

PUBLIC WORKS.

General.

26. The new office for the Accountant-General at Lahore was nearly completed; the Public Works Secretariat offices at Lahore were completed. Several works were completed chiefly in the Jhelum colony and the Lyallpur district for the Army Remount Department. Residences were built in

various places for Government officials. The expenditure on roads shows a decrease, but this is due to half the outlay on new feeder roads having been debited against district funds.

RAILWAYS.

27. There was a large increase in the number of passengers carried by the North-Western Railway, and the percentage of working expenses to gross earnings slightly decreased. Surveys were completed for 358·32 miles of line on the 5′ 6″ gauge and about ½ a mile on the 2′ 6″ gauge, the latter being for an extension of the Kálka-Simla Railway beyond its present terminus in Simla. In the former, 195·55 miles surveyed were for the doubling of existing line, while the doubling of 208 miles was actually completed. A length of 55·57 miles, from Sángla Hill to Shahdára (near Lahore), was added during the year.

The Delhi Electric Tramways were opened on the 3rd June 1908.

IRRIGATION.

28. The net profit of the year shows a considerable falling-off, due to the partial failure of the monsoon and low supplies in the rivers during the rabi season, and heavy special remissions on the Lower Chenab and Upper Bari Doab canals of charges on wheat and gram crops ruined by untimely rains. Work was continued on the large projects for the Upper Chenab and Upper Jhelum Canals. The drought, which was so disastrous in other ways, helped very much the works in hand and the manufacture of materials.

REVENUE AND EXPENDITURE.

29. The revenue raised in the province was 78·38 lakhs less than last financial year. The figures are given in detail in section 36. The large decrease in *Land Revenue* (in the *financial* year 1907-08) was due to the failure of the autumn harvest of 1907, necessitating suspensions of revenue on a large scale. Under *Stamps* the increase is mainly due to increased litigation consequent on the institution of suits which has been delayed owing to the extended period of limitation conferred by the Punjab Limitation Act. Under *Excise* the increase is due to increased consumption and also to keen competition at auctions and increased duty on coloured and sophisticated liquor. In expenditure the main items in the increase of over 22 lakhs are those shown under *Public Works, Irrigation, Police* and *Medical.* The finances of local boards and municipalities have been discussed in the body of the report.

VITAL STATISTICS.

Births and deaths.

30. In the body of the report figures have been given which show the terrible loss of life due to the ravages of plague which have caused the death-rate in 1907 to rise to 62·1 per 1,000. This death-rate is the highest recorded since the establishment of the system of registration forty-one years ago. The death-rate from plague was almost equal to the aggregate death-rate from all other causes and in Gujránwála actually rose to 80·6 per 1,000. The enormous loss of life caused by plague in the Punjab since 1902 when it first broke out in a severe epidemic form up to 1907 has well nigh decimated the province. It is also responsible along with malarial fever for a diminution in the birth-rate which was 40·8 per 1,000 or 2·9 per 1,000 less than that of 1906.

Medical Relief.

31. Towards the end of 1907 the late Sir Denzil Ibbetson ordered a general survey of existing medical arrangements in the province, and it is hoped that the data now being furnished by Civil Surgeons will enable the Punjab Government to inaugurate a scheme for improving the hospitals and dispensaries, many of which are badly housed, inadequately supplied with drugs and poorly equipped in other respects. Meanwhile the number of dispensaries continues to increase, having risen to 395 at the end of 1905 to 414 at the close of 1906 and to 425 at the end of 1907. Arrangements have also been made to enable private subscribers to earmark their contributions for particular objects, and thus each subscriber will be able to see for himself the good he is doing for his fellowmen and will continue to have a personal interest in his subscription which was lacking before when his money was a mere donation to the funds of the district board, a body to which no particular sentiment can attach. Other matters of less general interest, such as the improved facilities given to Assistant Surgeons and Hospital Assistants for keeping their knowledge up to date, have been dealt with elsewhere.

Sanitation.

32. Sanitation continues to make slow progress in the province. In the villages there has been practically no improvement; large sums are spent privately on the construction of wells, tanks, and travellers' resting places, but these sums are spent more from religious motives in the narrower sense than from philanthropy, and the actual method of expenditure is not too well supervised by the donor with a view to securing the maximum of benefit. No direct sanitary improvements have been made, though the necessity of them has been proved year by year in the plague epidemics. The villagers, on the whole, manifest little or no interest in the matter, are with difficulty persuaded to take elementary precautions against plague or malaria, and none of the rewards offered in places by district boards for improvement in sanitation were earned. In the colonies, where Government rules have helped to stimulate interest, some rewards were distributed as has been recorded elsewhere.

In the towns a somewhat less unsatisfactory state of affairs prevails owing to the presence of officials and municipal committees. Sanitary works under construction have made progress during the year, but in the maintenance of existing works an absence of zeal is manifest. The open system of drainage was adopted for the Punjab after most careful consideration, but it appears that unless some special efforts are made to reorganize the scavenging and flushing establishments of municipalities, these drainage systems will prove of doubtful benefit. In the meantime the Sanitary Engineer has reported that "with very few exceptions, the outfall drains and disposal works which were inspected were not well maintained. Local bodies do not appear to take the interest in sanitation they should, and there seems to be no systematic management of the scavenging staff."

Education.

33. In last year's Administration Report an account of educational progress during the preceding quinquennium was given, and since then progress has continued. The "practical" side of education is becoming

more popular as is indicated, on the one hand, by a large increase in the number of industrial and technical schools and by the fact that admissions into the Engineering School had to be restricted, and, on the other hand, by the success of the new "rural" schools where, by the teaching of the native system of accounts in place of Persian, the youthful zamindar may learn to protect himself from rash pecuniary transactions against which his father has had to be protected by objective legislation in the shape of the Land Alienation Act. The field of employment naturally determines the trend of students towards particular branches of education; thus the legal profession being at present overstocked accounts in part for the increased popularity of scientific and technical education. As remarked in a recent Government review, employment under local boards and municipal committeees forms an opening for Indian Engineers, and "there can be little doubt that the future extension of medical practice in rural tracts must be largely in the hands of the private practitioner." An interesting experiment in applied education is being made at the Forman Christian College, Lahore, where the pupils are encouraged to perform "social services," as for instance in village talks on sanitation, encouragement of primary schools, discouragement of litigation, etc.

34. The number of schools has increased from 561 to 607 and of scholars from 21,769 to 23,588, and there are many other signs of progress. An increasing number of Christian girls are endeavouring to go beyond the Anglo-Vernacular High Standard and two have gone to England or America from the Punjab to complete their education. The strongest and most important movement at present is that of the educated Hindu and Muhammadan classes for the higher education of their daughters, and popular prejudice against female education appears to be lessening. Female education.

35. With regard to discipline and moral training, last year's report may be referred to.

PART II.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1. Physical Features of the Country, Area and Climate.

(See pages 1—12 of the report for the year 1901-02.)

2. Historical Summary.

(See pages 12—32 of the report for the year 1901-02.)

3. Form of Administration.

(See pages 32—35 of the report for the year 1901-02.)

4. Character of Land Tenures and System of Survey and Settlements.

(See pages 35—43 of the report for the year 1901-02 and the Punjab Settlement Manual.)

5. Civil Divisions of British Territory.

(See page 44 of the report for the year 1901-02.)

6. Details of the last Census—Tribes and Language.

(See pages 45—53 of the report for the year 1901-02.)

7. Changes in the Administration.

Personnel.

1. Sir Thomas Gordon Walker, K.C.I.E., C.S.I., officiated as Lieutenant-Governor from the 22nd of May to the 11th of August 1907, during the absence on leave of Sir Denzil Charles Jelf Ibbetson, K.C.S.I. Sir Thomas Gordon Walker again assumed charge as temporary Lieutenant-Governor on the 23rd of January 1908, relieving Sir Denzil Charles Jelf Ibbetson, who retired from the service. It has with the deepest regret to be recorded that Sir Denzil Ibbetson died in England within a month of his retirement.

Area, population and revenue of the Punjab.

2. The area of the province according to the latest returns is 97,394 square miles, its population (census of 1901) is 20,340,372, and the land revenue collections 248 lakhs of rupees.

8. Relations with Tributary States and Frontier Affairs.

Political supervision.

3. The arrangements for the purposes of supervision of the Native States in the Punjab remain as they were at the time of the last report, Baháwalpur being included with the Phulkián States in the charge of a Political Agent. The States, with the exception of Chamba, which is in the political charge of the Commissioner of Lahore, are arranged in four groups as follows:—I, the Phulkián States, comprising the States of Patiála, Jínd and Nábha, for which a separate Political Agent was appointed on the 16th January 1901, and in whose charge Baháwalpur is now included; II, the States of Kapúrthala, Mandi, Máler Kotla, Farídkot and Suket in the political charge of the Commissioner of Jullundur; III, the States of Sirmúr, Kalsia, Pataudi, Loháru and Dujána in the political charge of the Commissioner of Delhi; and IV, the States of Bilàspur, Bashahr, Nálagarh, Keonthal and numerous other small States in the Simla Hills, which are in the charge of the Superintendent of Hill States, Simla.

Perhaps the noteworthy event of the year was the marriage on 9th March 1908 of Maharaja Bhupindra Singh of Patiála to the daughter of Sardar Gurnam Singh of Sangrúr.

The Raja of Farídkot who is still at the Aitchison College was betrothed to the daughter of Sardar Jiwan Singh, C.S.I., of Shahzádpur, in the Ambála district, who is related to the ruling family of Patiála by marriage. The young Nawab of Baháwalpur was formally installed in Darbar on 15th May 1907.

A new palace of a very large and costly nature is nearing completion in Kapúrthala, and a large building, known as 'Darbar House,' was finished in Mandi.

As illustrating the material progress of the country it is interesting to see that a hydro-electric water-works scheme, estimated to cost 10½ lakhs, has been commenced in Patiála, and it is hoped that this will be completed in 1908-09.

In Farídkot also, the grain mandi which had fallen into disuse has been revived and a bank has been opened by the State, with a starting capital of one lakh, in an outlying mandi near Bhatinda, the object being chiefly to help the agriculturist class in that vicinity and the traders on the spot. The founding of this institution is another instance of the promotion of modern methods of business and may be compared with the co-operative movement in the Punjab.

The agricultural conditions, as in the rest of the Punjab, were unsatisfactory on the whole, and in some of the States there were serious outbreaks of plague. The death rate in Kapúrthala was especially great, the total number of deaths being 19,984 in 1907-08 as compared with 7,686 in the previous year and 15,052 in the year before that.

The States of Jínd, Kapúrthala and Farídkot were honoured by visits from the Commander-in-Chief, and those of Patiála, Jínd, Nábha and Máler Kotla by visits from His Honour the Lieutenant-Governor. Major C. P. Thompson succeeded Lieutenant-Colonel Dallas as Political Agent of the Phulkián States and Baháwalpur in March 1908.

Full information will be found in the report for 1901-02 as to the area, population, gross revenue and estimated military forces, including police, of each State, and the following brief notices are inserted concerning special events of importance in the history of particular States during the year :—

PATIALA.

Area, 5,412 square miles; population, 1,596,692; gross revenue, Rs. 65,57,930; army and police, 5,522; race of Chief, Sidhu Jat; age of Chief, 16.

Personal.

4. The marriage of the Raja has been recorded above. The Council of Regency lost two of its members during the year, Lala Bhagwan Dás and the Khalifa Sayad Muhammad Hussain. Their places have been filled by Rái Bahádur Lála Nának Bakhsh, Assistant Guardian to His Highness, and Mír Tafazzul Hussain of the Chief Court.

General.

5. Unseasonable rain and a deficient monsoon and canal supply led to the sacrifice of a large amount of revenue. Settlement operations are approaching completion ; only five tahsils, of which three have been re-assessed this year, remain under settlement.

JIND.

Area, 1,259 square miles ; population, 282,051 ; gross revenue, Rs. 12,49,000 ; army and police, 1,868; race of Chief, Sidhu Jat; age of Chief, 29.

General.

6. As in Patiála, the agricultural conditions have been poor. The projected railway from Jínd to Pánipat has been approved by the Railway Board, and the Darbár are prepared to finance it.

NABHA.

Area, 928 square miles; population, 297,949; gross revenue, Rs. 14,71,539; army and police, 1,562; race of Chief, Sidhu Jat; age of Chief, 64.

Personal.

7. The Rája has enjoyed fairly good health. The Tikka Sahib held throughout the year the post of Additional Member of the Viceroy's Council.

The Rája continues to take minute personal interest in every side of the administration, especially in stock breeding.

BAHAWALPUR.

Area, 15,000 square miles; population, 720,877; gross revenue, Rs. 26,00,000; army and police, 1,093; race of Chief, Daudputra; age of Chief, 3.

8. Nawab Sadik Muhammad Khan, Abbasi, V, was formally recognised in Darbar on the 15th of May 1907. A Council of Regency consisting of a president and four members is to administer the State, subject to further consideration of the arrangement after two years, and under the presidency of Maulvi Rahim Bakhsh is reported to have made a good start. **Personal.**

9. The year has been a fairly good one for agriculture. The estimates have not been completely worked out, but a credit balance of some 6 lakhs is anticipated. The Council intend to invest savings during the minority of the Chief in productive works, and especially on the improvement and extension of the inundation canals, on which cultivation mainly depends: money is also to be put by for a perennial canal to be financed by the sale of State land in the Cholistan tract, the attempt to colonize which has proved unsatisfactory. **General.**

KAPURTHALA.

Area, 630 square miles; population, 314,351; gross revenue, Rs. 20,00,000; army and police, 1,106; race of Chief, Ahluwalia Sikh; age of Chief, 34; tribute Rs. 1,31,000.

10. As in last year, the Raja was absent in Europe for some months, the State Council conducting the administration during his absence. **Personal.**

11. There has been a remarkable decrease in the area cultivated in the rabi harvest. In the present year the fall amounted to 31,471 acres, and in the previous year also there had been a fall of 56,350 acres. **General.**

An elaborate system of water-works for the State gardens has been completed.

MANDI.

Area, 12,000 square miles; population, 174,045; gross revenue, Rs. 4,30,000; army and police, 172; race of Chief, Rajput; age of Chief, 24; tribute, Rs. 1,00,000.

12. The administration has continued to be conducted by the young Raja, Bhawani Sen, under the guidance of Rai Bahadur Padha Jiva Nand, the Wazir. **Personal.**

13. The year has been a somewhat unfortunate one. Owing to the failure of both harvests, an unprecedented rise in prices occurred. Expenditure exceeded income by Rs. 38,000, though this was due mainly to the Raja's marriage. There was a considerable amount of cattle disease, and, among the people, small-pox, measles and to some extent cholera were rife. **General.**

The reduction of the duty on salt with effect from 21st March 1907 has had an appreciable effect in increasing the outturn to an extent which more than compensates the British Government and the State financially for the lower rate imposed.

SIRMUR.

Area, 1,198 square miles; population, 135,687; gross revenue, Rs. 6,00,000; army and police, 458; race of Chief, Rajput; age of Chief, 41.

14. The Rani of Sirmur died in May 1907. **Personal.**

15. The Deori-Karáhan boundary between Jubbal and Sirmúr is still under discussion owing to the Sirmúr State being dissatisfied with the demarcation effected. **General.**

An extradition treaty has been arranged between Sirmúr and Jubbal on the same lines as that between the States of Sirmúr and Chamba, and has been approved by Government.

Maler Kotla.

Area, 167 square miles; population, 77,506; gross revenue, Rs. 5,47,127; army and police, 356; race of Chief, Sherwáni Afghán; age of Chief, 49.

Personal.

16. The Regent has continued to carry on the administration successfully and he was accorded two interviews with the Lieutenant-Governor. The relations between the Chief and the Khawanin have been defined by a decision of the Government of India.

General.

17. The crops were on the whole good, though somewhat below normal on barani lands. The general health of the people was also good, and there was some diminution of plague.

Faridkot.

Area, 642 square miles; population, 124,912; gross revenue, Rs. 3,36,250; army and police, 325; race of Chief, Barar Jat; age of Chief, 12.

Personal.

18. The young Raja and his brother are both pupils at the Aitchison College, and satisfactory reports have been received as to their progress.

General.

19. The State Council have conducted the administration with tact, sound judgment and fairness. When His Excellency the Commander-in-Chief visited the State he inspected the Imperial Service Sappers and expressed himself as satisfied with their general appearance and smartness. Certain industrial improvements have already been commented on and, in addition, it may be noted that, for the promotion of general sanitation and the prevention of plague, the Darbar obtained from Government the loan of the services of Assistant Surgeon Amrik Singh.

Chamba.

Area, 3,216 square miles; population, 127,834; gross revenue, Rs. 7,39,796; army and police, 419; race of Chief, Rajput; age of Chief, 39; tribute, Rs. 5,000.

General.

20. Raja Sir Bhure Singh is doing a great deal to improve communications within the State, and is arranging for the survey of a cart road to connect Chamba with the plains. He has also provided a building for a museum. The rendition of the reserved forests to the Raja (for a period of five years on probation) has now been completed, and an officer of the Imperial Forest Service has been lent to the State. Good progress is being made with the Gazetteer, Mr. J. Hutchison of the Scotch Mission having agreed to take it in hand and bring it out under the Commissioner's supervision.

Suket.

Area, 420 square miles; population, 54,676; gross revenue, 1,27,971; army and police, 94; race of Chief, Chandarbansi Rajput; age of Chief, 43.

General.

21. The condition of the administration continued to be unsatisfactory.

Kalsia.

Area, 168 square miles; population, 67,181; gross revenue, Rs. 1,70,079; army and police, 119; race of Chief, Jat; age of Chief, 25.

General.

22. The administration of the State in this the second year since the Sardar had obtained full powers continued to be good.

PATAUDI.

Area, 52 square miles; population, 21,933; gross revenue, Rs. 85,577; army and police, 42; race of Chief, Afghán; age of Chief, 48.

23. The Nawabzada of Pataudi who left the Aitchison College some time ago and was admitted to the Imperial Cadet Corps in July 1906 is now living at Pataudi. **Personal.**

24. Settlement operations are in progress. **General.**

LOHARU.

Area, 222 square miles; population, 15,229; gross revenue, Rs. 66,000; army and police, 43; race of Chief, Mughal; age of Chief, 48.

25. In order to pay the debts incurred by the Nawab a loan of Rs. 3,11,000 has been obtained through Government from the Mamdot Estate. The heir-apparent controls the finances of the State according to a budget sanctioned by the Commissioner. **General.**

BILASPUR.

Area, 448 square miles; population, 90,873; gross revenue, Rs. 1,90,000; army and police, 97; race of Chief, Hindu Rajput; age of Chief, 34; tribute, Rs. 8,000.

26. His Highness Raja Bije Chand had not at the end of the year under report returned to his State. **Personal.**

27. The land revenue assessment of Rs. 1,70,000 has been approved by Government. Progress has been made with State buildings. The Victoria Hall is practically finished, the hospital is now occupied, and the school well advanced towards completion. **General.**

BASHAHR.

Area, 3,820 square miles; population, 80,572; gross revenue, Rs. 95,000; army and police, 13; race of Chief, Hindu Rajput; age of Chief, 70.

28. The adoption of Kanwar Surendar Shah, brother of the Raja of Tehri Garhwál, by His Highness Raja Shamsher Singh has been recognised by the Govermnent of India.

OTHER HILL STATES.

29. Tika Kishen Singh, the Chief of Ghund, died in September 1907, and was succeeded by Tika Ranjit Singh. The administration of Keonthal continues to be unsatisfactory, while in Mailog dissensions among the members of Council became so acute that it was dissolved and a Manager appointed.

FRONTIER AFFAIRS.

30. The peace of the border has not been disturbed by big feuds or serious offences during the year; the working of the Border Military Police has been satisfactory, and also that of the joint jirgas.

9. Condition of the people.

31. The period dealt with in this report varies in different sections; in this paragraph it refers to the last half of 1907 and the first half of 1908.

In this period, owing to unsatisfactory rainfall and consequent shortage of water in the canals, a large area of crops failed, the failure amounting to 33 per cent. of the sowings. The famine in the United Provinces was the cause of large exports of grain, and general prices rose to a very high level, the harvest prices of the chief staples being from 80 to 90 per cent. above the normal.

Agricultural depression in the Punjab was, however, sufficiently met by liberal suspensions and remissions of land revenue. A test famine work was opened in Gurgaon for a few months in 1908, but the maximum number of persons on relief was only 1,758. Plague was much less virulent than in previous years. From September onwards the course of trade was diverted from the seaports to the United Provinces, and to those districts where stocks were in defect, as for example, Ambála, Rohtak, Gurgaon and Kángra.

It has been an excellent year for the fortunate owners of substantial areas of irrigated land. It has been a year of trial for others, but, from a variety of causes, the agricultural population has been able to stand the strain well. The zamindars of dry tracts had the surplus of two good harvests to fall back on, and the labouring classes have been readily able to obtain work at high wages.

CHAPTER II.

ADMINISTRATION OF THE LAND.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications:—

Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1906 to 30th September 1907.

General Report on the Operations of the Survey of India for the year ending 30th September 1907.

Annual Report on the Settlement Operations in the Punjab for the year ending 30th September 1907.

Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1907.

Annual Report of the working of the Punjab Alienation of Land Act, XIII of 1900, for the year ending 30th September 1907.

Annual Reports for the Chenab, Jhelum and Chuniân Colonies for the year ending 30th September 1907.

Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1907.]

10. Realization of the Land Revenue.

General conditions in 1906-07.

32. In the kharif 1906 the first phase of the monsoon in districts dependent on rainfall was satisfactory and the second was everywhere excellent. For the rabi crop of 1907 a good rainfall was received, but some damage was caused by abnormal rain in April; notwithstanding this, however, the matured rabi area was 1,178,153 acres in excess of the record area of the year before. The total area sown in the year was 9 per cent. above the normal area, but outturns were somewhat unsatisfactory, that of the wheat crop being as much as 32 per cent. below last year's figures.

Prices, though in most cases easier than in the previous year, were still generally above normal. The price of wheat rose in the more important wheat-producing districts.

Fixed land revenue.

33. The total demand was Rs. 2,05,35,180 as compared with Rs. 2,05,86,026. The difference of Rs. 50,846 was due to a total increase of Rs. 1,13,997 and decrease of Rs. 1,64,843. The most considerable item of increase was occasioned by the addition of Rs. 32,094 in Râwalpindi, consequent on the revision of assessment in Gujar Khan tahsil. A large increase is shown in Lahore (Rs. 32,593); the chief items being alluvion assessments and assessments of newly colonised land in the Chuniân Colony. The only other important increase is shown by Multân (Rs. 10,743), caused by the assessment of wells coming into use and the introduction of deferred increases in assessment.

Decreases of Rs. 53,127 in Gujrânwâla, Rs. 14,771 in Shahpur and Rs. 35,387 in Jhang are due to the introduction of fluctuating assessments in canal-irrigated and riverain tracts. Of the total demand, 97·4 per cent. was recovered, while collections on account of previous years amounted to $6\frac{3}{4}$ lakhs.

Suspensions and remissions.

34. The total amount of suspensions during the year was Rs. 3,68,732 as compared with 22·78 lakhs last year. Of this sum, however, Rs. 61,221 were recovered during the year. The largest amount suspended, *viz.*, Rs. 1,18,869, was in Hissar.

Rupees 5,21,624 of suspended revenue were remitted during the year, remissions from the current demand being included in these figures. Out of this sum Rs. 3,05,780 were remitted in the Rohtak district alone where a constant succession of bad harvests had made the collection of old arrears inadvisable. The total amount of fixed land revenue under suspension at the close of the year was Rs. 18,91,154, which is Rs. 8,52,052 less than the figures for the previous year.

Fluctuating land revenue.

35. The amount of land revenue collected under systems of fluctuating assessment was 44·17 lakhs as compared with 45·07 lakhs last year. This sum is greater than one-sixth of the land revenue of the province. The system is on the whole popular with revenue-payers.

Miscellaneous land revenue.

36. The total collections for the year of miscellaneous land revenue amount to Rs. 13,29,961, and, as usual, the colony districts contribute the great bulk of the total. The largest items consist of sale of Government estates 5·07 lakhs, sale of waste land and nazarana 2·15 lakhs, sale of town sites 1·20 lakhs, and tirni (dues for grazing in Government wastes) 1·26 lakhs.

Miscellaneous.

37. There has been an increase in the total number of writs and warrants issued for the realization of revenue, but this increase is more apparent than real owing to a change in method, and there has been no increase in the number of cases of imprisonment or of sales of property of defaulters.

There is in most districts a steady increase in the amount of revenue remitted by money order, and the system is evidently found to be a great convenience. In Karnál over 22 per cent. of the revenue was paid in this manner.

In the year under report the quinquennial analysis of agricultural statistics has been brought up to date, and it is satisfactory to note that the history of the past five years has been one of general progress. The cultivated area has been increased by 1½ million acres, canals have been extended by 175 miles, and 1,838 new masonry wells have been constructed. The incidence of land revenue per cultivated acre, which stood at 15 annas 9 pies in 1901-02, is now Re. 1 and 2 pies. This increase is small in view both of the rise in prices and the gradual substitution of a fluctuating for a fixed demand.

With regard to operations under the Northern India Canal and Drainage Act, the only matters of interest to note are the decision to postpone the enhancement of occupier's rate on the Bari Doab Canal, to substitute a combined rate for the owner's and occupier's rates on the Western Jumna Canal, and to allow the Baluch tumandars extensive powers in the distribution of water and collection of assessments over the purely Baluch villages of their tumans.

Under the Punjab Minor Canals Act eight natural channels in the Kángra district with their tributaries have been notified for the purposes of section 4, and all the distributaries fed by them included in schedule II of the Act. Action has also been taken in some other districts, notably in the case of the Gurgaon bunds.

Advances under the Land Improvements and Agriculturists' Loans Acts were in little request during the year, while recoveries were good and remissions, except of old standing arrears, unnecessary.

11. Survey.

Survey of India Parties Nos. 9, 14 and 18.

38. Owing to the urgent requirements of the military authorities for the completion of the surveys along the North-West Frontier, No. 18 Party, which has for many years been working in the Punjab, was mainly diverted to the North-West Frontier Province, working from the frontier eastwards. This Party and No. 14 Party, however, did a considerable amount of triangulation prior to survey in the country round Attock, that to the west of Miánwáli, and that to the north-west of Dera Gházi Khan, while a small area immediately to the west of Dera Ghází Khan was surveyed.

In addition to its regular topographical work, No. 18 Party did a large amount of traverse work. Nine traversers were employed in the Jhelum Colony, executing 626 linear miles of traversing at a cost of Rs. 10-6-0 per mile. Meanwhile arrangements had been concluded with the Punjab Government to traverse and lay down base lines over the whole of the desert areas of the Bari Doab, in Montgomery and Multán districts. The work consists of first traversing and then laying out from the traverse lines base lines about 2½ miles apart over the whole area, the object being to prevent men working on the square system from going far astray in laying out and apportioning land in the new colony, so that the Punjab settlement staff may be able to break up the whole area into a system of rectangles without accumulative error.

The supply of these reliable traverse data as a basis for the settlement survey in the proposed Lower Bari Doab Colony and in the Gujránwála district should ensure a greater degree of accuracy in the revenue maps and reduce the work of their revision at future settlements.

Boundary demarcation.

39. The first practical test on a large scale of the advantages of the riverain maps was made last cold weather, when, by the use of the survey maps and the deputation of a traverser to locate fresh marks on the ground, all discrepancies in the boundaries between Kapúrthala and Amritsar were brought to a head, and, for the most part, at once disposed of.

No change of any importance has been made in district boundaries during the past year. The Shahpur district has been rounded off by including within its borders the Jhang portions of the Jhelum Colony, and the entire colony is now contained within the former district.

12. Settlements.

40. The conclusion of the operations in Hazára completes the settlement work in the North-West Frontier Province, for which the Punjab Settlement Department was responsible. The Káwalpindi and Háfizabad settlements have also been brought to a close during the year. Their duration has been practically five years in each case and thus, as remarked last year, experience is showing that the anticipation that operations can ordinarily be completed in four years is too sanguine. The postponement of the enhancement of occupier's rates on the Bari Doab Canal has been adverted to above.

13. Land Records.

Patwaris.

41. In the past year an endeavour has been made to secure a larger number of patwari candidates from the agriculturist castes, and, in consequence, the proportion of such candidates has somewhat increased, while, at the same time, the improvement in the standard of education of candidates has been maintained. Attention is being paid to the problem of the housing of the patwari staff as the present arrangement, under which the patwari is made responsible for the up-keep of the patwarkhana, is admittedly unsatisfactory.

On the whole the conduct and work of the patwaris has been satisfactory. Now that they are paid by Government, there is some danger that they may come to be regarded rather as a grade of Government servants than as members of the village community.

Mutations.

42. Mutation work steadily increases, and this year the number of cases for disposal amounted to 889,374 compared with 815,561 last year. During the year new arrangements have been made for the supply of mapping sheets and of plotting scales.

14. Waste Lands and Government Estates.

Chenab Colony.

43. No fresh allotments have taken place during the year. The post of Colonization Officer was abolished on 1st April 1907, being absorbed in that of Deputy Commissioner of Lyallpur, who also retains charge of the special colony work in respect of the portion of the colony which lies within the Jhang district. The control of the colony villages in the Lahore and Gujránwála districts has been handed over to the Deputy Commissioners concerned.

On the whole the working of the canal has been good, and over cent. per cent. of the area allotted was irrigated in the year 1906-07, the autumn harvest being, with the exception of cotton, good, though the spring harvest was one of the worst on record owing to untimely rains, locusts and hailstorms.

Two of the most remarkable features of the year have been the increased congestion of traffic on the railway and the scarcity of manual labour. The grain export has been so large that the railway has been entirely unable to cope with it. Owing to congestion of traffic in Karáchi and lack of waggons at Lyallpur, some wheat lay untouched for six or seven weeks on the stations and received repeated showers. Eventually a special staff had to be employed to clean Gojra, Lyallpur and Chiniot Road Stations of the rotton wheat caked into the mud of the open goods yard, and probably a cholera epidemic was only narrowly avoided. Representations have been made to the North-Western Railway, and the matter is under the consideration of the Local Government.

The problem of the supply of labour has become even more acute than formerly owing to the ravages of plague and to general economic conditions such as the rise in prices. During the harvest even boys were refusing twelve annas a day. This state of affairs is more or less general throughout the province, but is accentuated in Lyallpur where customary rates naturally have not the same force as in the older districts. It is fitting, therefore, that the first steps to alleviate it should be taken in Lyallpur, and this has been done by the Agricultural Association who have been the pioneers of reaping machines, twenty-seven of which have been ordered from England.

The experiment of granting rewards for village sanitation has proved successful, and good progress has been made with roadside tree-planting.

The Jhelum Colony.

44. Practically all the good land in this colony has been allotted. The balance is at present given out on temporary cultivation to old residents of the tract in the hope that it may improve to such an extent as to make it fit for allotment to outsiders, its present quality being somewhat inferior. The figures for temporary cultivation show excellent results, and by granting patches of culturable soil on the confines of the unculturable desert to the Janglis, the habits of these original nomadic and predatory inhabitants of the tract are reported to have become comparatively more peaceful and honest. The question of making permanent grants to these people, however, has not yet been settled, as the experiment has not had a sufficient trial and as there are other claimants of the land.

The unevenness of the canal water-supply has been a source of grave complaint. Ninety-six per cent. of the allotted area was sown during the year, however, which shows that it is the distribution of the water-supply rather than the total amount of the supply which is at fault. Steps are being taken to remedy the defect, but the equitable distribution of the water of a large canal is a problem requiring time for its solution. There has been a marked success during the year in horse-breeding, a result which is largely due to the skill and tact of the supervising staff of the Remount Department.

The prevailing scarcity of labour noticed in the Chenab Colony also made itself felt in this colony in the spring of 1907, when, as in 1904, the crops were left standing for want of hands to reap them. Improvements in communications have been delayed from the same cause, but in spite of these drawbacks substantial progress has been made. The towns are increasing in size, and considerable progress has been made in arboriculture.

Chunian Colony.

45. This colony passed a peaceful and prosperous year undisturbed by any untoward events except the occasional inroads of thieves from the Montgomery district, against whose depredations it is proposed to establish a police station at Pattoki. A comparatively small area remains for allotment. Crops were reaped on 92 per cent. of the area allotted, and in spite of a partial failure of wheat and cotton the harvests on the whole were above average. In view of these results the working of the canal appears to have been good. The progress of building operations, the improvement of communications and the good prices realized at sales of residential sites all indicate that the colony is in a flourishing condition.

The Jhang Colony.

46. The allotment of most of the available areas was carried out during the year, and only a small balance of presumably inferior soil remains. The irrigation arrangements appear to be inadequate as less than 13 per cent. of the allotted area was sown. The condition of the markets at Shah Jiwana and Jhang does not appear to be satisfactory, but when the intended improvements are carried out better results may be obtained.

46-A. A Commission was appointed in October 1907 to enquire into and report on numerous matters connected with the administration of the canal colonies. The Commission after travelling through the colonies and recording a large amount of evidence submitted its report in April 1908.

Other Government waste.

47. The report of the working of the Chos Act, 1900, is encouraging. The plantations of trees and grass in the beds and on the banks of these hill torrents are a source of considerable profit to the people, and the Deputy Commissioner of Hoshiárpur reports that in the hills the beds of the streams are becoming narrower and deeper. The people themselves are beginning to realize the advantages attainable as is proved by applications received from six villages to have certain of the provisions of the Act extended to their areas.

15. Wards Estates.

48. The number of estates under management is 47 as against 45 last year, three properties having been taken over and one released. In the case of the latter debts amounting to Rs. 21,592 have been paid off and a balance of Rs. 37,384 accumulated during the 19 years of control by the Court of Wards. At the same time the landed property of the ward has been considerably increased and the estate generally improved. With regard to the investment of balances, increased attention is being paid to expenditure on improvements as forming a more profitable form of investment than that of placing large balances in securities which are easily negotiable and form a temptation to the ward to indulge in extravagance when released from tutelage.

An attempt has been made during the year to form an estimate of the gross value of the estates under the Court of Wards by adding to the moveable assets and the house property the value of the land calculated at eighty times the land revenue, but excluding the value of the jagirs enjoyed by the wards. According to this estimate the gross value of the 47 estates with their area of over half a million acres is $2\frac{1}{3}$ crores of rupees.

16. Revenue and rent-paying classes.

Land Alienation Act.

49. The amended Act, the provisions of which were referred to in last year's report, came into force on May 9th, 1907, but it is, as yet, too early to gauge the effect of the abolition of the "statutory agriculturist." The only new tribes notified in the past year were the Awans in the Amritsar district, the Khaggas, Sainis and Gujars in Lyallpur, and the Arains in Muzaffargarh. The working of the Act throughout the year has been satisfactory, and it has been authoritatively stated that the people, after seven years' experience, express their approval of it. It is contended by the members of agricultural tribes that it has not lessened the value of their land, that it has not contracted their credit to any serious extent, that it has reduced the rate of interest to solvent landowners, has encouraged thrift, and decreased litigation.

It is satisfactory to note that this opinion is borne out by statistics. The amount of land permanently transferred is less than in any year since the passing of the Act; while the average price per acre calculated on total area, which was on the average Rs. 46 for the five years before the Act was passed, has now risen to Rs. 56. As regards mortgages, the redemptions have shown a continuous and encouraging increase. During each of the last three years the area redeemed has exceeded the area mortgaged; and during the present year the combined area of the land redeemed by agricultural tribes and mortgaged to them is 290,000 acres greater than the land which they have lost by mortgage. This is counterbalanced to some extent, however, by the probability that much of the land redeemed was redeemed only for the purpose of mortgaging it to greater advantage.

In sum, it can safely be said that the agricultural tribes are as a whole holding their own and are also slowly recovering land both by purchase and by redemption from mortgage.

Tenants and rents.

50. The number of suits for enhancement of rent has doubled during the year and amounted to 1,400, out of which 1,100 were successful. This number is, however, very small compared to the number of occupancy tenants in the province, and the cases are confined chiefly to Amritsar, Hoshiárpur and Rohtak. Proceedings for the ejectment of occupancy tenants have been extremely small in number, but similar proceedings with regard to tenants-at-will have increased considerably owing mainly to a general rise in rents following on that in prices; but as there are some 4 million tenants-at-will in the province and in only 6,187 cases were such tenants actually ejected by order of an officer during the year, it is clear that landlords and tenants generally manage to adjust their differences without the aid of the courts.

Descent of Jagirs Act.

51. Under the Descent of Jagirs Act action continues to be taken, and the total number of jagirs notified under the Act up to 30th September 1907 was 97 with a value of over 6½ lakhs per annum.

CHAPTER III.

PROTECTION.

[Detailed information and statistics on the subjects included in this chapter will be found in the following reports :—

Police.—Report on the Police Administration of the Punjab for the year 1907.

Report on the working of the Criminal Tribes Act for the year 1907.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1907.

Prisons.—Report on the Administration of the Jails in the Punjab, 1907.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1907.

Registration.—Punjab Registration Department Report for 1905-07.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1907-08.

Local Boards Administration.—Report on the working of the Local Boards in the Punjab during the year 1907-08.

And in Statistics of British India, Part VI—Judicial (First Issue) and Part VIII—Local Funds (First Issue).]

17. Legislating Authority.

(See pages 83 and 84 of the report for the year 1901-02.)

18. Course of Legislation.

52. No meeting of the Punjab Legislative Council was held during the year 1907-08. **Punjab Council.**

53. The following changes took place during the year among the Hon'ble Members of the Council :—

(*a*) The Hon'ble Mr. J. McDouie and the Hon'ble Thakar Mahan Chand vacated their seats on the expiry of their term of two years. The Hon'ble Mr. S. Finney resigned his seat on the 7th October 1907.

(*b*) The Hon'ble Malik Umar Hayat Khan and the Hon'ble Sardar Partab Singh on the expiry of their term were re-appointed on the 6th February 1908 for a further term of two years.

(*c*) The Hon'ble Messrs. J. Wilson and R. E. Younghusband and the Hon'ble Lala Harkishen Lal were appointed on the 4th and 17th December 1907 and 6th February 1908, respectively, to fill up the existing vacancies.

Bills passed.

54. The following Bills were introduced into the Legislative Council of the Governor-General of India during the year under report :—

No. of Bill.	Subject.	Extent.	Date of introduction into the Legislative Council of the Governor-General.
2 of 1907 ...	A Bill to consolidate and amend the laws relating to the procedure of Courts of Civil Judicature.	Whole of British India, except the Scheduled Districts.	6th September 1907.
3 of 1907 ...	A Bill further to amend the law relating to private trusts and trustees.	Madras, North-West Provinces, Punjab, Oudh, Central Provinces, Coorg and Assam and to other parts of British India to which it is extended by Local Government.	27th September 1907.
4 of 1907 ...	A Bill to make better provision for the prevention of meetings likely to promote sedition or to cause a disturbance of public tranquility.	Whole of British India ...	18th October 1907.
5 of 1907 ...	A Bill further to amend the Legal Practitioners Act, 1879.	Ditto ...	Ditto.
1 of 1908 ...	A Bill to consolidate and amend the law for the limitation of suits and for other purposes.	Ditto ...	3rd January 1908.
2 of 1908 ...	A Bill further to amend the Whipping Act, 1864, and the Code of Criminal Procedure, 1898.	Whole of British India except the Scheduled Districts.	13th March 1908.
3 of 1908 ...	A Bill to give greater facilities to the public for calling for and inspecting accounts of public charities.	Whole of British India, except the Scheduled Districts.	20th March 1908.
4 of 1908 ...	A Bill to amend the law of Insolvency in the presidency towns and in the town of Rangoon.	Presidency Towns ...	Ditto.

Acts.

The India Acts which apply to the Punjab as well as to the other parts of British India which received the assent of the Viceroy during the year were as follows :—

No. of Act.	Subject.	Extent.	Date of Viceroy's assent.
V of 1907 ...	An Act further to amend the Local Authorities Loan Act, 1879.	Whole of British India ...	18th October 1907.
VI of 1907...	An Act to make better provision for the prevention of public meetings likely to promote sedition or to cause a disturbance of public tranquility.	Ditto ...	1st November 1907.
I of 1908 ...	An Act further to amend the Legal Practitioners Act, 1879.	Ditto ...	3rd January 1908.
II of 1908 ...	An Act further to amend the Indian Tariff Act, 1894.	Ditto ...	Ditto.
IV of 1908...	*An Act further to amend the Coroners Act, 1871, and the Prisoners Act, 1900.	Calcutta and Bombay ...	17th January 1907.
V of 1908 ...	An Act to consolidate and amend the Law relating to the Procedure of the Civil Courts and Civil Judicature.	Whole of British India, except Scheduled Districts.	21st March 1908.

* Does not apply to the Punjab.

19. Police.

Condition of crime and working of the police.

55. The year was marked by a slight decrease in crime, and the total number of cognisable cases reported was 66,632 as compared with 67,510 in 1906. The general tendency of recent years is in the direction of an increase in non-cognisable crime, while cognisable cases found 'True' by the police have remained fairly stationary and Magistrate's 'True' cognisable cases have regularly decreased from year to year. Judged by mere percentages the working of the police has not been quite so successful as in last year, but in large and important cases and in the arrest and breaking up of gangs of criminals the police have done well. The number of murders which occurred is very much the same as last year, but the difficulty of obtaining convictions remains as great as formerly. The causes of this difficulty are said to be the lack of observance of rules as to the appearance of the Public Prosecutor, delays and postponements of cases, and, in the northern part of the province, concealment of evidence by the village community which last has given rise to the remark that "nothing short of communal responsibility will break down this custom. Where the community continues to protect the individual, the community should suffer." In the year under discussion convictions were obtained in only 41 per cent. of the murder cases, in 64 per cent. of the attempts to murder and in 74 per cent. of the cases of culpable homicide.

Rioting shows a trivial increase, the chief cases being the Lahore and Ráwalpindi riots due to unrest. Otherwise there was nothing in this class of crime to call for comment.

Perhaps owing to the events of April and May, the failure of the monsoon and the unparalleled virulence of plague in the early summer of 1907, there has been a considerable increase in dakaiti ; the total number of cases was 69 as compared with 46 last year and 43 in 1905. There were also 6 cases of dakaiti with murder. A very large number of these cases, however, were traced to a well organised band in Lahore, the members of which have been caught and punished.

During the year convictions were obtained against the Editor, Printer and Proprietor of "India" for publishing a politically objectionable article; Editor of the "Hindustan" was also concerned.

There is little that is noteworthy among other classes of crimes except the four cases of fouling water in Ráwalpindi district. This fouling, or pretended fouling of water, was an instrument devised by malcontents to disquiet the minds of the ignorant people, and some difficulty was experienced in eradicating the impression produced. Convictions were secured in two out of the four cases.

A satisfactory feature of the year's administration has been the continued and increased co-operation between the police of different districts and of Native States, and the aid rendered by Zaildars and Honorary Magistrates to the police has also been favourably commented on. The rising social status of the police should tend to eliminate their inevitable unpopularity and thus to increase their efficiency which depends considerably on the co-operation of the people.

Punitive Posts.

56. Of the 27 punitive posts which were in existence at the end of 1906, 13 were continued for a further period and 12 new posts were established. The location of punitive posts generally is reported to have had a deterrent effect on crime.

Railway Police and Criminal Investigation Department.

57. Excluding false cases, the number of cognisable offences reported during the year to the Railway Police was 2,126 as against 2,403 in 1906, an increase of 277, but the percentage of convictions was more than maintained. The force has maintained a satisfactory record, and co-operation with the district police has continued to be cordial. The Criminal Investigation Department has continued to progress and, besides helping in the apprehension of absentee members of criminal tribes, conducted successful inquiries into cases where the area of investigation extended far beyond the Punjab. In the Punjab National Bank fraud case after an intricate inquiry extending to two years the offenders were brought eventually to justice.

RURAL POLICE.

(See pages 88 and 89 of the report for 1901-02.)

CRIMINAL TRIBES.

58. The number of persons registered remains much the same as last year. The Mahtams of Lahore, the Minas of Gurgaon, the Pakhiwaras of Siálkot, the Sansis in Amritsar and Ambála though not elsewhere, the Bauriahs and the Harnis have been favourably reported on, and in some cases a distinct desire to settle down is apparent. Owing to their bad reputation it is sometimes difficult to accomplish this desire, and in this connection it is noteworthy that, acting probably on a time-honoured principle, 12 members of one tribe (the Minas) have been appointed village watchmen and 5 have been enrolled in the police.

20. Criminal Justice.

Percentage of convictions.

59. The percentage of persons brought to trial who are convicted does not vary markedly from year to year, and the chances remain usually at something more than three to one in favour of the accused; but there is an increasing tendency towards discouraging frivolous litigation by dismissing cases *in limine* and by awarding compensation to persons unjustifiably accused.

Registration of marriages.

60. The alarming increase in offences relating to marriage which was so marked in the last six years has not been so evident this year, but the advisability of taking steps towards some system of registration is under consideration. In a few districts a rough system of registration has already been established.

Security cases.

61. As regards preventive action by Magistrates the statistics for the last seven years show that there is a marked preference for the procedure of binding over to keep the peace over that of taking security for good behaviour. This tendency is perhaps too strong.

Punishments.

62. In the matter of punishment the figures show that the principle is being more carefully followed that serious and repeated crime should be met by severe sentences and that casual crime, more especially among children, should be met by sentences of whipping, by release on security, or, in the case of children, by relegation to the Reformatory.

The Reformatory School.

63. The Reformatory School at Delhi was established in 1903 and its record is satisfactory. The average daily strength in 1904 was 19; in 1905, 39; in 1906, 52; in 1907, 67; but the opportunities afforded by the school for the detention and reform of youthful criminals have not even yet been fully utilised.

Decisions.

64. From a legal standpoint the Full Bench Judgment of the Chief Court, published as No. 12 (Criminal) of 1907, is of great importance. In that decision it was held that a re-entry by a person on land from which he has been legally ejected amounts to a criminal trespass. This ruling has probably had its effect in reducing the number of such cases.

Political unrest.

65. In the spring of 1907 a considerable feeling of unrest prevailed in the province which was partly due to the prevalence of plague and high prices and partly to agitation against certain measures of Government, such as the introduction of the Colonization Bill (referred to in paragraph 46 of last year's report) and the proposed enhancement of the occupier's rates on the Bari Doab Canal. It was found necessary in May 1907 to deport two of the agitators under Regulation III of 1818 and to apply to certain districts Ordinance No. I of 1907 which ultimately developed into Act VI of 1907, dealin with public meetings of a seditious character. Prosecutions were also institut in connection with riots at Lahore and Ráwalpindi. A certain number persons were convicted as the result of these prosecutions, and the feeling unrest had by the autumn considerably abated. The deported agitators w released in November 1907, and it was decided that the Seditious Meetings (passed in November) should not be applied to this province.

21. Prisons.

66. The provincial jails, owing to the opening of that at Campbellpur on 1st January 1907, now number 29, and the fair plans and estimates for the proposed Central Jail at Ludhiána have been prepared. The need for this jail is pressing owing chiefly to the endeavour to apply modern principles of sociology in the treatment of criminals, more particularly of the juvenile and non-habitual classes; the present jail accommodation is insufficient for this. Unfortunately, however, the scheme is a very costly one involving an expenditure of eight lakhs and will have to be postponed. In the same connection and in analysing the nature of the sentences imposed on the convicts admitted into jails some of the points noticed in section 20, 'Criminal Justice,' again call for attention. Thus 72 boys under 16 years of age were sent to prison as opposed to 34 sent to the Delhi Reformatory and 3,264 persons were sentenced to terms of imprisonment of less than one month. The difficulty of segregating casual from habitual offenders and the advisability of imposing fines or using the provisions of section 562 of the Criminal Procedure Code instead of inflicting short periods of imprisonment do not seem to be as yet fully realised by the Magistracy, though, as noted in paragraph 62, some improvement is noticeable.

Guarding and maintenance.

67. The total cost of guarding and maintenance was Rs. 70-8-6 per head against Rs. 69-9-0 in 1906 and Rs. 67-3-7 in 1905, but the increase is in general items only, there being a most satisfactory decrease, notwithstanding high prices, in the cost of diet, which was brought down from an average of Rs. 24-2-6 to one of Rs. 22-15-0 per head.

Employment of prisoners.

68. The forms of labour on which convicts were employed underwent no change during the year. Exclusive of those unable to work through sickness, etc., 34 per cent. of those sentenced to labour were employed on manufactures as compared with 35 per cent. last year. These figures compare unfavourably with those of other provinces and endeavours are being made to bring about a more satisfactory state of affairs. There are other factors, however, which should be considered in making the comparison with the figures of other provinces and which might make the comparison somewhat less unfavourable.

Vital statistics.

69. The standard of health maintained has been slightly lower than in the preceding year, but for the second year in succession not a single case of cholera occurred in any jail in the province. There has been a decrease in the number of cases of malaria, and a further decrease is expected owing to greater care in the distribution of quinine. In 1907 there were 2,461 cases as against 3,272 in 1906. Captain Forster's serum for dysentery promises to be of great use in the treatment of that disease.

22. Civil Justice.

General.

70. The civil administration of the year presented few abnormal features. The effect of the extended period of limitation for money suits mentioned in last year's report will not be clearly visible till 1911, but there are indications that a decrease in such suits will occur. Three full years have now elapsed since the new Act was made and the suits held up by that Act have now for the most part probably been instituted, yet the figures for such suits are still much lower than before the passing of the Act. The number of matrimonial and guardianship (Act VIII of 1890) cases continues very high and the amount of time which District Judges require to spend over the latter is a serious problem. During the year there has been a marked improvement in the execution of decrees, probably due to the instructions issued by the Chief Court to ensure the methodical distribution of execution cases.

The Chief Court.

71. There was a large increase in every class of appellate work, but disposals more than kept pace with institutions. The Court consisted of 9 Judges up to the vacation and thereafter of 6 Judges.

The sixth Judge's appointment terminated in April 1908, but its temporary renewal has since been sanctioned.

23. Registration.

72. The main interest of the Registration Report which is a triennial one for the years 1905-07 lies in the light which is thrown by it upon the effect felt on the registration figures by the passing of the Land Alienation Act on the one hand and the increasing confidence in mutation procedure on the other.

73. The figures for the years immediately preceding and those following the passing of the Land Alienation Act show very markedly the large decrease in transactions relating to land which followed the passing of the Act; and the tendency which is observed in the figures for compulsory registrations, that is to say, for registrations of land of superior value, to rise gradually since the check received in 1901, while partly no doubt due to the increased knowledge of the terms on which alienations may be made under the Act is due also to an increase in urban transactions which are outside the scope of the Act.

74. In the case of optional registrations which deal with small transactions relating to lands of value less than Rs. 100, the persistent decrease in the number of transactions is very marked, and as there is no corresponding decrease in the total number of sales and mortgages actually made, it may be concluded that the continual decrease in optional registration is due not merely to a decrease in the number of transactions which may at option be registered, but also to the increased confidence placed by the holders of small properties in the land records in which the mutations of such property are entered. If this be the true explanation, it is a most satisfactory result, and the practice must tend towards the maintenance of a high level of accuracy in our land records. The subject is one of particular interest in this province and must be carefully watched, as it may be possible to take further measures hereafter to reduce the complexity and expense of land transfers amongst agriculturists.

75. The change in the method of remunerating Sub-Registrars had a curious effect in that in some cases the Sub-Registrars refused to accept that part of their remuneration which consists of a salary of Rs. 30 per month as they thought this small sum derogatory to their dignity. It has, however, now been recognised that there is no objection to a Sub-Registrar being honorary instead of departmental. It is possible that the introduction of this change in remuneration may result in a lowering of the standard of social position of Sub-Registrars and, in view of the experience of the United Provinces, this will need to be watched.

A scheme is under preparation for a general levelling up of the pay of Sub-Registrars' muharrirs at least to the minimum scale usual in other departments.

24 Local Boards Administration.

General.

76. Local boards have been abolished in Hoshiárpur, and the proportion of official members on the district board has been altered. In Ludhiána and Delhi interest is taken in elections; in other districts, as before, there is usually no contest, while the interest displayed by members in the proceedings of the boards is also still very variable. In order to ensure the exercise by district boards of their executive powers measures are being taken to introduce monthly meetings throughout the province. The Lieutenant-Governor has also invited the attention of Commissioners to the possibility of boards holding their meetings in each tahsil in turn, so that the recognition of the equal claims of all parts of the district may be ensured, and to the need of supplying properly drawn up agenda statements some time before the meetings as is done in the larger municipalities.

Public Works.

77. District Engineers are still being appointed, but several districts experience difficulty in obtaining men of suitable character and qualifications. There is here an opening for the Indian Engineer. The boards have been advised to improve their engineering staff and to equip themselves with such necessaries as steam rollers which they must have if they are eventually to manage their metalled roads without the assistance of the Public Works Department.

25. Municipal Administration.

Constitution and working of committees.

78. The year has been uneventful. Certain petty municipalities were marked down for conversion into notified areas, and the necessary changes have been given effect to since the close of the year. In Simla the system of election has been abolished, and the committee now consists of the Deputy Commissioner, one of the Civil Surgeons, the Executive Engineer and representatives of the Government of India, the house-owners, the trades and the Indian population. As in the case of some other municipalities previously, such as Amritsar and Multán, it has been found advisable now to extend the system of each religious community electing its own representative to Ambála and Rewári so as to equalize the number of Hindu and Muhammadan members on the committees. Two hundred and thirty-four vacancies among elected members occurred during the year, but in only 35 cases were the seats contested, which confirms the remark so frequently made that the municipal franchise is not much appreciated in the Punjab.

Provident funds continue to be established, and it is hoped that they will soon be adopted by all local bodies; the model rules framed by Government have been accepted by many committees and found suitable, with the exception that it has been found advisable that committees should contribute cent. per cent. with the subscriptions of their servants.

Taxation.

79. The Punjab Trades Association continues to inveigh against the existence of octroi, and it is officially admitted that the abolition of this tax is desirable from the purely economic standpoint. There are signs, notably in some recent proposals of the Lahore municipality, that the objections of the citizens to direct taxation are diminishing with the advent of modern conditions of trade, but the remark of Sir Charles Crosthwaite quoted in a Government of India resolution of 1899 that octroi is a customary tax, that direct taxation would be more vexatious, and that the abolition of octroi would have to be forced by Government still has considerable force.

The wholesale abolition of octroi under present conditions in the Punjab is impracticable. The tax has been abolished in Murree and Kángra during the year and has not been newly imposed anywhere. Steady progress is being made in the revision of octroi schedules and, as a rule, these now only include the main staples of consumption, while care is being taken to avoid taxing articles of through trade and the raw materials of local industries.

Excluding the hill municipalities where incidence is high there are 17 municipalities as against 12 last year where the incidence of taxation per head of the population is above two rupees, but some allowance has to be made for an increase in the population not taken into the statistical calculation.

Sanitation and miscellaneous.

80. The Municipal Administration Report relates to the period 1907-08, during which the health of the towns has been on the whole good. Since the close of the year, however, and owing to the heavy summer rains there has been a cholera visitation in Lahore and appalling mortality from fever both in that city and Amritsar. The conservancy arrangements in both cities are inadequate and a popular demand for better arrangements has been awakened to an unprecedented degree. The Ludhiána water-works scheme made good progress during the year and has now been completed. A mono rail has been constructed by a native firm at Ambála to connect the railway station with the grain market and ginning factories, and the Delhi electric tramway has now been completed.

26. Military (Volunteers).

Strength and distribution of Volunteer Forces.

81. The strength of the Volunteer Corps on the 31st March 1908 is reported to have been as follows :—

Corps.	Company.	Station.	Officers.	Non-Commissioned Officers.	Privates.	Total enrolled strength.	Total number of efficients.	Sergeant-Instructors.
Punjab Light Horse.	...	Field Officers and Staff	8	...	...	8	8	4
	A	Lahore	2	15	88	105	101	...
	B	Ambála	1	11	46	58	58	...
	C	Rawalpindi	2	5	62	69	64	...
	D	Peshawar	1	2	16	19	19	...
	...	Reservists	1	...	48	49	48	...
	...	Add for Supernumerary Officers	5	...	...	5	...	...
		Total ...	20	33	260	313	298	4
1st Punjab Volunteer Rifles.	...	Field Officers and Staff	9	...	...	9	9	10
	A, B, C and Cadet ½ Company	Lahore	7	36	226	269	262	...
	D	Ráwalpindi	3	9	115	127	126	...
	E	Amritsar	2	6	48	56	56	...
	F	Delhi	2	6	63	71	71	...
	G and H	Murree	7	15	137	159	152	...
	I	Peshâwar	2	7	49	58	58	...
	K	Ferozepore	1	8	59	68	68	...
	L	Srínagar	3	8	85	96	89	...
	L Section	Siálkot	1	5	30	36	36	...
	...	Reservists	1	...	103	104	100	...
	...	Add for Supernumerary Officers	22	...	...	22	...	...
		Total ...	60	100	915	1,075	1,027	10
Simla Volunteer Rifles.	...	Field Officers and Staff	10	...	...	10	9	2
	A	Simla	3	9	30	42	40	...
	B	Simla	2	12	92	106	90	...
	C	Simla	2	7	52	61	60	...
	D	Simla	3	8	37	48	48	...
	E	Simla	3	10	94	107	106	...
	F	Sanáwar	3	9	137	149	149	...
	...	Reservists	...	...	14	14	...	...
	...	Honorary and Supernumerary Officers ...	12	...	...	12	...	...
		Total ...	38	55	456	549	502	2
North-Western Railway Volunteer Rifles.	...	Field Officers and Staff	8	...	...	8	8	12
	A	Karachi Cantonment	3	8	56	67	67	...
	B	Multán	3	7	101	111	111	...
	C	Lahore	6	17	204	227	223	...
	D	Lahore	1	10	85	96	94	...
	E	Ambála	2	11	92	105	105	...
	F	Saháranpur	2	8	124	134	132	...
	G	Kotri	...	7	83	90	90	...
	H	Lahore	1	17	90	108	107	...
	I	Quetta	2	9	64	75	75	...
	K	Ráwalpindi	4	17	102	123	123	...
	L	Sukkar	5	12	91	108	108	...
	M	Karáchi City	3	5	47	55	55	...
	...	Honorary and Supernumerary Members ...	5	...	...	5	...	...
		Total ...	45	128	1,139	1,312	1,298	12

Inspections.

82. The Punjab Light Horse, the 1st Punjab Volunteer Rifle Corps and the North-Western Railway Volunteer Rifles were inspected in February 1908, and the Simla Volunteer Rifles in October 1907. The results were considered satisfactory.

E. / 1907–08

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

[Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

Agriculture.—(1) Report on the operations of the Department of Land Records and Agriculture, Punjab, for the year ending 30th September 1907.

(2) Annual Report of the Experimental Farm, Lyallpur, for the autumn and spring harvests, 1907-08.

(3) Report on the operations of the Department of Agriculture, Punjab, for the year ending June 30th, 1908.

(4) Annual Report of the Punjab Veterinary College and of the Civil Veterinary Department, Punjab, for the year 1907-08.

(5) Report on the Land Revenue Administration of the Punjab for the agricultur al year ending 30th September 1907.

(6) Report on the working of Co-operative Credit Societies for the year ending 31st March 1908.

Weather and Crops.—(1) Report on the Meteorology and Climatology of the Punjab for the year 1907-08.

(2) Punjab Season and Crops Report for 1907-08.

Horticulture.—Annual Report on the Government Agri-Horticultural Gardens, Lahore, for the year ending 31st March 1908.

Forests.—Progress Report on Forest Administration in the Punjab for 1907-08.

Arboriculture.—Progress Report on the Arboriculture in the Punjab for the triennial period 1905 06 to 1907-08.

Mines and Quarries—(1) Reports on the working of the Dandot Colliery for the half-years ending 30th June 1907 and 31st December 1907.

(2) Statement showing the produce of minerals and gems for the calendar year 1907.

Manufactures.—Report on the working of the Factories Act during the year 1907.

Trade.—(1) Report on the Internal Land Trade of the Punjab for the year ending March 31st, 1908.

(2) Report on the External Land Trade of the Punjab for the year 1907-08.

(3) Report by the Registrar of the Joint Stock Companies on the working of the Joint Stock Companies in the Punjab during the year 1907-08.

(4) Monograph on Iron and Steel Industries in the Punjab, 1907.

Public Works.—Report of the Public Works Department, Buildings and Roads Branch, for the year 1907-08.

Irrigation.—Revenue Report of the Irrigation Department in the Punjab for the year ending 31st March 1908.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agriculture.—Prices and Wages in India, 25th issue, 1907.

Weather and Crops.—Agricultural Statistics of India, 22nd issue.

Mines and Quarries.—Records of Geological Survey of India, volume XXXVI.

Report of the Chief Inspector of Mines in India under the Indian Mines Act (VIII of 1901) for the year ending 31st December 1907.

Manufactures.—Financial and Commercial Statistics, 1st issue, new series.

Railways.—Administration Report on Railways in India for the calendar year 1907.

Trade.—Accounts of the trade carried by rail and river in India, 19th issue.]

27. Agriculture.

Agricultural Department.

83. This year has been spent in completing the arrangements for the organisation of the department. The hope expressed in paragraph 82 of last year's review that the college at Lyallpur would be opened by 1st July 1908 has not been realised. The internal fittings of the building, the water-supply, lighting arrangements, &c., are still incomplete, but it is hoped that the college will be opened from the 1st July 1909. The sanctioned staff of European experts is complete, and has been usefully employed in acquiring a knowledge of the agricultural conditions of the province. In addition to this, results of some importance have been achieved in certain directions. Much has been done to popularise agricultural machinery, and useful experiments have been made with regard to cereals and cottons. Experiments concerning *reh* cannot be completed till the chemical laboratory is ready. Difficulty is being found in recruiting the proper type of man as agricultural assistant. A hopeful sign has been the useful work done by agricultural associations in Lyallpur and Hissar, and instructions have been given that Deputy Commissioners should encourage the formation of such associations.

Experimental farms.

84. Work at the Lyallpur agricultural station was much hindered by the character of the season, which was unusually unfavourable. But the report of the Principal shows that the organisation of experiments by his programme has already given definite results. He shows that jute and sugar beet can be grown with success. More accurate information has been obtained about varieties of wheat and cotton. The most important result is the demonstration that comparative experimental plots should be long, narrow, and alongside of one another. Various patterns of agricultural machinery have been tried, and most progress has been shown in the use of reapers. A considerably lighter type of manual delivery reaper was tried and found generally superior, but the gear of the knife was rather too low. Satisfactory types of threshing machine and horse hoe have not yet been found. It has been decided to secure a site in the Jullundur district for another experimental farm.

Agricultural operations in the districts.

85. American cotton has suffered a set-back, largely due to a serious plague epidemic resulting in great scarcity of labour and poor cultivation in the Jhelum colony. In order to facilitate the disposal of the produce, a system of periodical auctions at stated places is being introduced. Egyptian cotton has not done well. The distribution of selected indigenous seed has not been successful except in Hissar. The experiment is being closed in Lahore and Gurgaon. In Lyallpur a fresh start had to be made in 1907 owing to the ravages of bollworm in the preceding years. In Dera Ghází Khan the experiment does not show much chance of appreciable success.

Punjab Veterinary College.

86. The receipts of the Lahore Veterinary College show an increase of Rs. 3,368, proportionately distributed over the various heads. Contingent expenditure was Rs. 10,879 less than last year, when a large amount was spent on laboratory apparatus. At the close of the year there were 261 students in the college, as against 287 last year. The three year's classes contain respectively 88, 103 and 70 students. It is satisfactory that the number of new admissions has been reduced. The latest number however is still too large if the students are to receive proper individual attention. More than 62 per cent. are Muhammadans. Work in the segregation ward has been satisfactory. New buildings are being gradually completed. A head farrier has now been engaged, and his appointment has resulted in an increase of Rs. 500 in the forge receipts.

Civil Veterinary Department.

87. A new system of collecting statistics of disease has been introduced this year of requiring village headmen to report through the subordinate revenue officials all outbreaks of epidemic disease. The system has begun to work well. The feature of the year's administration has been the introduction of the new system of working for Veterinary Assistants, by which there is only one itinerating man in each district, while the rest are stationary in the hospitals.

The stationary men have to leave their hospitals to attend all outbreaks of contagious disease,' and the arrangements will not be complete till each hospital has two Veterinary Assistants, who will tour alternately. The Simla Veterinary Hospital has been transferred to the Simla municipality, but remains under the supervision of the department. Owing to pressure of other work, nothing was done in the direction of district cattle surveys.

88. Deaths from equine contagious disease in non-selected districts rose from 38 to 107, *surra* being the cause of 90 deaths, against 19 in the previous year. Yet the year under report, owing to drought, was a particularly healthy one for animals. The total number of deaths from contagious disease was 15,375 against 17,375, but the number of cases reported was 59,938 against 102,412 in the previous year. The decrease is most apparent in rinderpest and foot and mouth disease. Preventive inoculation against hæmorrhagic septicæmia was suspended, as the serum was found to be of doubtful efficacy.

The subordinate staff numbers 128, being 30 short of the full complement desired: it continues to improve in efficiency.

Condition of cattle.

89. The year was a bad one agriculturally, so the supply of green fodder was insufficient. The districts of the Delhi division fared better than might have been expected, thanks to large accumulations of jowar and chari stalks after a good *kharif* in 1906. Fodder was scarce in the Ráwalpindi division.

Agricultural pests.

90. This year boll-worm, which has done such extensive damage to the cotton crop of previous years, was extremely rare. The winter of 1906-07 was a mild one, and the history of the year furnishes strong evidence in support of Mr. Lefroy's theory that the outbreak in 1905 was due to the exceptionally severe cold of January and February of that year, which practically annihilated the parasite which normally keeps boll-worm in check. The study of boll-worm and its parasites is being continued. A case of ear-cockle in wheat was investigated, and led to the discovery that the disease is perhaps indigenous, but it does not appear to be normally virulent.

Loans to agriculturists.

91. Only Rs. 1,26,499 were advanced under the Land Improvement Loans Act in the year 1906-07 against Rs. 1,90,430 in the previous year, and under the Agriculturists Loans Act only Rs. 2,77,119 against Rs. 9,96,916. Under the former Act Rs. 1,66,846 were recovered out of a total realisable demand (principal only) including arrears of Rs. 1,82,965, and under the latter Act Rs. 7,38,735 out of Rs. 9,44,044. Under the former Act the Government has a financial gain of Rs. 29,265, and under the latter a loss of Rs. 25,403; so on the total loan operations for the year 1906-07 the net gain was Rs. 3,862.

Co-operative credit societies.

92. The progress recorded is of a substantial character. Rural societies have increased in number from 174 to 253, their total assets have risen from roughly 2¾ to over 5¼ lakhs and the surplus at the end of the year (Rs. 53,864) is twice as large as in July 1907. That societies have not failed entirely to meet the exceptional demands made upon them is proved by the fact that the amount of capital out on loan to members is twice as great as last year, and over 3¾ lakhs were lent in the twelve months. As the normal rate of interest taken by societies is less than 10 per cent., while that demanded by private money-lenders in a year of scarcity is anything above 25 per cent., the great benefits that have already accrued from the movement are obvious.

93. There are still some points which require criticism. The most unsatisfactory feature in the history of the movement so far has been the large number of societies that have died at birth or been wound up after a brief and inglorious existence. In most cases misguided official zeal has been the cause of the fiasco. In the review of the first report and again last year the need of caution in founding societies under official influence and the danger of failure were emphasised, but the history of the movement in the Gujrát and Siálkot districts during the past year would seem to show that the lesson has not yet been fully learned.

94. There can be no question as to the advantage of enlisting the sympathies of the village money-lender. That he should show a certain amount of hostility to the movement is inevitable, though the Registrar perhaps takes an exaggerated view of its intensity. But the sahukar is an excellent businessman and knows that the courts cannot recover for him anything like the amount found to be his due, and if he is convinced that financing a Co-operative Bank at a moderate rate of interest is an absolutely safe investment, he will probably be willing to seek through its agency a suitable means of employing his capital. That the hostility of small money-lenders will cease entirely is not to be hoped for, but much can be done to mitigate it to the great advantage of both parties.

95. Among districts, Gurdáspur still leads the co-operative movement, though during the past year better progress was made in Lyallpur than in any other district. It speaks well not only for the prosperity, but also for the enterprise of the colonists in the Chenab Canal colony that in addition to founding societies which are solvent and flourishing, they have in most cases adopted bye-laws providing that surplus funds will be lent to societies established in the villages in which the colonists originally resided. Though no surplus funds are yet available, some societies established in other districts mainly owe their origin to this hope of assistance. This has led the Registrar to think that it would be easy to establish a Central Bank at Lyallpur.

Prices.

96. The year under report is that ending 15th January 1908. Prices were very slightly above normal at the beginning of the year, but they rose rapidly with the failure of the monsoon and the active demand for grain in the United Provinces. The grain of both harvests sold at extraordinarily high prices, wheat being 77 per cent. above the average normal harvest price, unginned cotton 31 per cent., and gram as much as 114 per cent. It is said that the agriculturists of the Chenab colony have never made larger profits than those derived from the grain and toria of the last autumn crop. From September onwards the course of trade was diverted from the seaports to the United Provinces, and to districts whose stocks were in defect, such as Ambála, Rohtak, Gurgaon and Kángra. The year opened with ample reserves, the surplus of several harvests having been stored in some instances. With high prices the whole of this was placed on the market and disposed of. There has been no scarcity of grain in the province taken as a whole.

28. Weather and Crops.

The annual rains.

97. All districts were in defect as regards total rainfall except Hissar, Montgomery, Jhelum, Miánwáli, Lyallpur and Muzaffargarh, which were slightly above the average. But the figures for these districts are misleading. The rainfall was untimely and badly distributed everywhere, and the dominating features of the meteorology of the year were the premature termination of the monsoon, the late arrival and inadequacy of the winter rains, and the drought of February and March.

The kharif rains.

March and April 1907 were marked by heavy general rain, the rainfall during April being 311 per cent. in excess of the normal. These conditions were extremely injurious to the standing wheat crop, but were favourable for sugarcane and cotton sowings. May and June were about normal, except for heavy rain in the South-West, Central and West Punjab on the 7th of June which was of no particular value to the agriculturist. The monsoon was somewhat late in reaching the Punjab. Holding off until the 20th of July, it was feeble during that month, but strengthened during August and gave ample, continuous and general rain up to the 24th, when the current withdrew abruptly and completely. September, October, November and December were rainless except for a few very scattered and light showers in the first week of September. The monsoon, although belated, was in time to permit of almost a normal area being brought under cultivation, conditions being more favourable in the Delhi division than in other parts of the province. The

prospects of the crop were remarkably hopeful until the third week of August, but the cessation of the monsoon three weeks before the usual time was absolutely disastrous, and most of the dry crop was practically a total failure. Special mention should be made of good falls registered in parts of the Hissar district in the last weeks of June and July. Early sowings of bajra on the June showers came to maturity and contributed largely towards the escape of the district from severe scarcity. The supply of water in the Western Jumna Canal was very deficient in this harvest as well as thoughout the rabi. Large areas were affected by the lowness of the rivers, inundation canals generally opening rather late and closing early and river floods being very disappointing.

The rabi rains.

The untimely withdrawal of the monsoon current left the soil too dry for sowings on unirrigated land except in a few sandy tracts where measures had been taken to conserve the available moisture. There was an immense contraction in unirrigated autumn sowings, and some reduction also on irrigated land owing to the shortage of water in perennial canals and the early stoppage of inundation canals. It was hoped that the winter rains would begin sufficiently early for extensive supplementary sowings on unirrigated lands in the Central and North Punjab. But these hopes were not realised, the first fall being delayed until January 10th, when excellent rain was received all over the province. This was very late, but, in spite of this, large areas of wheat, barley and *masr* were sown as far south as Ambála. Occasional light local showers until the 3rd of February helped germination and materially improved the prospects of the standing crop. But, from this point onwards, adverse conditions again reasserted themselves strongly, and no further rain was registered until April 1st when a week's cloudy and wet weather just before the harvest improved the outturn of those standing crops which had been sown in the autumn and saved the late sown crops in the Salt Range. The late sown crop was unable to survive the drought of February and March except in the Salt Range districts where the straw was very short and the outturn about ¼th of the normal. With good rain in February and March this crop would have been successful over a wide area. A very serious shortage of water has to be recorded in all the canals.

The autumn harvest.

98. The area placed under kharif crops was 11,405,027 acres. This represents an advance of 483,160 acres or 4 per cent. on the previous year, but is 8 per cent. less than the normal. The principal increases compared with the quinquennial average were 13 and 5 per cent. in Hissar and Multán respectively. A decrease of 21 per cent. occurred in Siálkot, and decreases ranging from 11 to 17 per cent. are reported from Montgomery, Jhelum, Lahore, Miánwáli, Muzaffargarh, Gujrát and Gujránwála. The most noteworthy variations under the more important crops were as follows :—

	Area in 1906.	Area in 1907.	Difference in acres.
	Acres.	Acres.	
Jowar	1,557,818	1,368,753	− 189,065
Bajra	2,501,351	2,629,254	+ 127,903
Sugarcane	279,317	393,727	+ 114,410
Cotton	1,260,510	1,317,850	+ 57,340
Chari	1,252,963	1,603,979	+ 351,016

The severe frost of February 1905, which destroyed almost all the standing seed canes, led to a sharp contraction in the sugarcane area in 1905 and 1906. But the area sown last year was 13 per cent. above the average, and this may be attributed to the high price of *gur* and to timely rain in April. It is satisfactory that the crop is rapidly becoming more popular on the Chenab and Jhelum Canals. There being very little apprehension of a recurrence of bollworm, there was a further recovery in the cotton area and the normal area was placed under this crop.

The spring harvest.

99. In the rabi 13,123,383 acres were sown as against 18,963,681 acres last year. The contraction amounted to 121,565 acres under irrigated and 5,718,733 under unirrigated crops. The total area is 12 per cent. below the normal, and would have been much less but for late sowings on unirrigated land in January. The falling-off, which is distributed over all districts, is entirely due to the sudden termination of the monsoon which left the soil too dry for sowings on unirrigated land, and caused a short supply of water in canals. The chief variations in important staples were as follows :—

	Area in 1906-07.	Area in 1907-08.	Difference in acres.
	Acres.	Acres.	
Barley	1,334,922	1,359,929	+ 25,007
Wheat	9,657,171	7,393,314	— 2,263,857
Gram	4,629,459	1,769,332	— 2,860,127
Oilseeds	1,446,304	870,788	— 575,516

The stability of the area under barley is due to its quick-maturing quality which led to very extensive sowings in January. It will be noticed that the contractions under wheat, gram and oilseeds make up almost the entire shortage in the rabi, but it should be remembered that the wheat, gram and oilseeds sowings of 1906-07 were abnormally large. The areas under wheat and oilseeds in the year under report were, after all, only 5 per cent. and 22 per cent. below the normal, respectively.

Irrigation.

100. The total irrigated area, 10,792,531 acres, is 24,204 acres more than in 1906-07, but is considerably below the maximum normal irrigated area of 1905-06, which amounted to 11,469,499 acres. A record area would certainly have been brought under cultivation but for the serious shortage of water in all canals and in tanks, which led to a contraction in the area irrigated from canals, tanks and other sources. A large decrease of 141,982 acres in the canal-irrigated area in Lyallpur is partly due to the decision of the canal department to reduce irrigation to 75 per cent. on the allotted area so as to prevent over-cropping and provide for new schemes. The resources of the province as regards well irrigation were fully utilised. All available masonry wells were worked to their utmost capacity, and temporary non-masonry wells were sunk wherever the water level was sufficiently near the surface. Masonry wells in use increased in number from 246,041 to 252,252 and non-masonry wells from 33,133 to 42,406. The well irrigated area was 3,989,295 acres as against 3,132,151 acres in 1906-07.

29. Horticulture and Arboriculture.

Horticulture.

101. In the Lahore Agri-Horticultural Gardens there was a surplus on the year's working of Rs. 2,249. The income from the sale of fruit was much less, as the area under fruit trees has been still further reduced. This area is being converted into lawns. The water-supply has been much improved. The season was very unfavourable, yet the income from the sale of garden produce was higher than in any previous year. Forty gardeners were sent to fill vacancies in the province and beyond its limits. The demand for skilled men exceeds the supply.

The gardens at Gujránwála and Amritsar are in a flourishing condition. New gardens have been started at Nikanawan in the Shahpur district, at two places in the Ráwalpindi district, and at one place in the Kángra district.

Arboriculture.

102. The report is a triennial one, and deals with the period from 1905-06 to 1907-08. District Boards have now 8,308·64 miles of avenues, a net increase of 792·40, while the length planted is 1,148 miles, of which 222 have failed. This figure is to be compared with only 598 miles planted in the

previous triennium. Groves have decreased from 4,835 acres to 4,823 and plantations have increased from 1,896 acres to 1,927. At the close of the triennium the Irrigation Department had 5,007 miles of avenues out of a total length of 8,773 suitable for planting. The length planted in the period under review was 1,443 against 1,007 in the previous period. Plantations increased from 22,517 acres to 24,254. The Public Works Department showed 1,046 miles planted out of 1,356 suitable for planting.

The financial results were not good: the Public Works Department, Provincial divisions, alone showed a surplus of Rs. 21,127, while the District Boards showed a deficit of Rs. 3,16,808 and the Irrigation Department a deficit of Rs. 3,18,256.

30. Forests.

Area.

103. The area under the management of the Forest Department was reduced from 9,330·88 square miles to 9,138·57 square miles. Nothing has yet been decided about the exact areas to be transferred to the irrigation colonies.

Settlements.

104. The Bhedpur forest of 631 acres was finally constituted a reserved forest. Much trouble is caused in certain divisions, notably in Kángra and Kulu, by reason of the forest settlement having been made under chapter IV of the Forest Act instead of under chapter II.

Demarcation.

105. The demarcated boundaries are 10,847 miles in length. Much improvement is still required, but divisional officers have little time to devote to this work.

Surveys.

106. There have been no new departmental surveys. The expenditure incurred was chiefly for mapping charges.

Working plans.

107. The prescriptions of existing working plans were generally carried out. Working plans are required for 4,764 square miles, chiefly in the Lahore, Chenab, Shahpur, Multán and Montgomery divisions, but as these will be affected by the introduction of irrigated colonies, no steps can yet be taken.

Communications and buildings.

108. Only 2 miles of cart road and 68 miles of paths were made, against 152 miles last year. The want of progress arose to some extent from the necessity for curtailing expenditure on account of the prevailing scarcity, but it was chiefly due to the large number of officers of two or three years' service whom it was necessary to place in charge of heavy divisions, the services of senior men not being available.

The much-required work of improving the housing accommodation of the department was hindered by the same causes.

Forest offences.

109. The total cases of the year show an increase of 1,151, chiefly under the head of illicit felling. The number of cases taken into court was 861, and convictions were obtained in 80·25 per cent. The number of cases compounded rose from 4,346 to 5,247. At the same time further enquiries by the Conservator, and a discussion of this question at the Forest Conference, leave no room for doubting how undesirable it is to use section 67 to the extent now prevailing: not only does it enable unscrupulous subordinates to obtain illicit gratification, but also it prevents the infliction of deterrent punishments.

Protection from fire.

110. The area which the department attempted to protect rose by 19,883 to 607,828 acres. Of this no less than 2·82 per cent. or 17,153 acres were burnt. The total cost of protection was Rs. 6,360, an increase of Rs. 1,360. The number of fires increased from 281 to 380, but the area burnt by each fire was considerably below the average in most divisions.

Protection from cattle.

111. 19·23 per cent. of the total area was entirely or partially closed to grazing. The increase in the number and size of the flocks of sheep in the lower hills is still more marked, and a speedy decision is necessary on the policy to be adopted with regard to the conflict between forest conservancy on the one hand and the immediate interests of the people on the other.

Protection against injury from natural causes.

112. In Ráwalpindi and Kulu the beetles attacking the *pinus excelsa* have been identified. A similar pest in the Simla catchment area forest has not been successfully dealt with so far. From Chamba the deodar is reported as being attacked by a bark-boring beetle, not yet identified.

Sylviculture.

113. Throughout the province the drought was inimical to successful work. The cost of plantations is being found to be excessive, and the better plan is to resort to more sowing until we have a subordinate establishment which can be trusted to do good planting work without perpetual supervision. In Simla a number of new species of eucalyptus are being tried, and experiments in resin tapping are being made in Kángra.

Exploitation.

114. The shortage of railway waggons still greatly hampers the sale of firewood from Changa Manga, although the number of waggons supplied rose from 1,334 in 1906-07 to 1,640 in the year under report. It is being found advisable to extend the use of purchasers' agency in the case of wood sold, though it is also found that the abandonment of departmental works gives considerably less relief to the establishment of all ranks than was expected.

Financial results.

115. The total revenue was Rs. 15,60,064, a decrease of Rs. 4,936, due to the retrocession of the Chamba forests. The total expenditure rose by Rs. 27,239 to Rs. 11,84,668. The cash surplus of Rs. 3,75,396 is less than the average of the five past years by Rs. 2,24,099. The reason is partly that the sale of timber appears to have been of surplus stock, and partly that the transfer of the Chamba forests involves a decrease of about a lakh of rupees. Now that departmental sales of wood hardly exist it is much more difficult to ascertain the tendency of the timber market than used to be the case when the department was a large seller. But there seems to be a distinct tendency for the price of all kinds of timber to rise in the Punjab.

31. Mines and Quarries.

Gold.

116. Small quantities of gold to the value of Rs. 9,587 were obtained from washings in the Indus, Jhelum and Sutlej, where they issue from the hills.

Petroleum.

117. One thousand and ten gallons of petroleum were collected in the Miánwáli and Attock districts.

Alum.

118. Seven thousand and five hundred maunds of alum, worth Rs. 75,000, were produced in the Miánwáli district.

Coal.

119. The only mines of importance are those worked by the North-Western Railway at Dandot and Khost. The former yielded 36,459, and the latter 29,378 tons of coal. In both cases work was hampered by lack of labour.

Salt.

120. The amount of salt produced at the cis-Indus and Kálabágh mines and at the Sultánpur salt works was 2,942,648 maunds, as compared with 2,935,737 maunds in the previous year.

32. Manufactories.

Large industries.

121. The total number of factories increased from 235 to 253, of which 16 belong to Government. The number of gins has outrun the available supply of raw cotton, but flour and rice mills are also becoming very popular. In many of these less than 20 persons are employed; so they are not technically factories. The number of persons employed in factories is 23,286 men, 3,420 women and 1,290 children.

General condition of factories.

122. Fifty factories were inspected once, 76 twice, and 68 more than twice. Of the 59 factories which were not inspected at all, 34 were permanently closed, and of the remaining 25 many were visited, but were found closed. On the whole, there seems to have been a great improvement in the reality and the thoroughness of the inspections. The sanitary condition is generally satisfactory, except in the case of several factories in Lahore. A matter which requires more general attention is the necessity of suitable

arrangements in case of fire. The general health of the operatives is reported as good. The wages earned in factories are generally higher than agricultural labourers can obtain, and the workers are generally satisfied within their lot. There were 251 accidents in 1907 as compared with 279 in 1906. Of these 14 were fatal and 25 serious.

Iron and steel industries.

123. An interesting monograph on iron and steel industries in the Punjab has been written by Mr. G. Worsley, Assistant Commissioner. It shows that the work of the village blacksmith remains of the same character as it was a hundred years ago, being confined to the manufacture of rough unfinished implements, chiefly for agricultural use. The craftsman in the towns shows a considerable improvement. In many cases he developes considerable skill, and under competent supervision in workshops and factories is capable of doing good work. Apart from work in railway workshops and the like, there are various branches of industry. Iron safes, steel trunks, &c., are made in Gujránwála. Locks are made in Jullundur, Ludhiána, Delhi, Siálkot, Gujrát and Rúpar in the Ambála district. Cutlery is made in Gujránwála and Siálkot and at Bhera in the Shahpur district. At Batála in the Gurdáspur district flour mills and sugarcane presses are made : and occasionally lathes of quite good workmanship.

With regard to artistic work, there is scarcely any to be found in the Punjab except some damascene work in Siálkot and Gujrát. There is very little demand for it, and the work is almost entirely of a cheaper and poorer quality. Some artistic cutlery is made at Bhera, but the manufacture of the metal part is very simple, and the only artistic part is the handle made of a kind of jade, either plain or a mosaic of this jade with a black stone and a white stone.

33. Trade.

Total trade.

124. The total trade by rail and river of the province in each of the past three years, excluding animals and treasure, is shown in the subjoined table :—

Year.	Imports.		Exports.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1905-06	34,265,921	22,08,16,773	43,175,245	18,36,15,749
1906-07	28,696,430	22,37,04,458	54,837,968	21,88,30,406
1907-08	40,301,583$\frac{11}{40}$	25,91,77,359	62,943,875$\frac{1}{5}$	28,56,00,964

The figures for imports show an abnormal increase in weight and value, far exceeding those of all previous years, the value being actually 3½ crores of rupees greater than that of last year.

Exports have also increased extraordinarily by no less than 8,105,907 maunds in weight and over 6½ crores of rupees in value. These figures represent the great demand for food-grains in the United Provinces and Bengal, to which the bulk of the exports of grain and pulse were sent.

The explanation of the high value of the increased exports, as compared with the weight, is to be found in the high prices obtaining for food-grains in the areas affected by famine to which the exports mainly took place.

The steady and marked increase in value, especially of the exports, is a clear indication of the rapid growth in general prosperity of the province.

All imports have advanced, principally piece-goods and yarns ; but the main advance has been made in exports, wheat and cotton being the chief contributaries.

The wheat export reached nearly one million tons in spite of the bad kharif.

There are complaints of large admixtures of castor-seed with the cotton seed exported.

Trade in grain.

125. Traffic in "Grain and Pulse" for the last three years is shown in the following table :—

Years.	Imports.		Exports.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1905-06	1,887,188	66,58,215	33,221,977	9,17,25,269
1906-07	1,218,101	46,47,519	44,612,7 6	11,99,50,457
1907-08	2,020,288	49,74,723	52,421 281	18,80,85,332

The figures for exports give an abnormal increase of 7,808,565 maunds with a value of nearly 7 crores of rupees over the figures of last year. This alone accounts for nearly all the increased weight of exports shown in paragraph 124 and more than accounts for the increased value, thus emphasizing again the facts that the Punjab export trade is mainly one of food-grains, and that it produces far more grain than it consumes, the value of the surplus exported last year having equalled six times the land-revenue demand of the province.

The imports are also abnormal, practically double the maundage and more than double the value in rupees of the previous year, and is mainly due to the increased imports of jowar, bajra and rice not in the husk, to supplement the large exports of wheat and gram.

Animals and treasure.

126. The trade in animals shows slight increase both in imports and exports, but the only important increase is in the number of horned cattle imported from the United Provinces of Agra and Oudh. This is doubtless due to the famine and fodder scarcity and the cheaper prices prevailing in consequence.

The imports of treasure are more than 213 lakhs above the figures of last year, while the exports have fallen by more than 85 lakhs.

The total figures for treasure are—

Year.	Imports.	Exports.
	Rs.	Rs.
1906-07	3,38,94,394	1,44,81,652
1907-08	5,52,15,095	59,19,111
Difference ...	2,13,20,701	85,62,541

The large increase of imports of silver bullion may be ascribed to the following causes :—

(1) The failure of the 1907 monsoon and the subsequent scarcity which enabled grain dealers and agriculturists to sell their stocks at abnormally high rates. Their savings were consequently greater than usual and were invested in silver bullion or expended in the purchase of heavy silver jewellery.

(2) The increase in the number of marriages among Hindus in the early part of the year, owing to the fact that no marriages are possible for some 18 months to come among them, with the result that silver bullion for the manufacture of ornaments was in much greater demand than usual.

The decrease in the exports of silver coin seems to be accounted for by the fact that in the normal years coin is chiefly exported from the Punjab to purchase grain in the United Provinces, whereas last year there was no grain available.

River-borne trade.

127. The imports have increased by over 47 thousand maunds in weight and about 5½ lakhs of rupees in value. The exports are also better by over 7½ lakhs of maunds in weight and 44 lakhs of rupees in value.

The following comparative table gives the figures for the past three years :—

Years.	Imports.		Exports.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1905-06	162,910	11,06,501	1,494,376	51,45,064
1906-07	166,090	11,38,647	1,617,683	49,78,591
1907-08	213,610	16,87,021	2,375,937	93,81,180

Imports.

128. There is a satisfactory increase of 44 lakhs of rupees in the value of coal and coke, due no doubt to the industrial development of the province. The number of factories for the year 1907 has increased from 235 to 253, the great majority being cotton ginning and pressing factories, and all requiring coal or coke for their engines.

There was an increase of over 143 lakhs of rupees in the imports of cotton piece-goods, European, and a decrease in cotton piece-goods, Indian, of over 64 lakhs.

The increases under jowar and bajra and rice not in the husk amounting collectively to 46½ lakhs of rupees are probably due to the importation of these cereals to replace the increased exports of wheat, gram and the other food stuffs. The increase in gunny bags is due to the increased exports of food-grains.

Kerosine shows a tendency to increase, the popularity of this oil as an illuminant being now assured. Moreover, on the score of its cheapness it is now ousting mustard oil, formerly more generally in use in native homes. There was a decrease of about 7 lakhs of rupees in the value of liquors imported the previous year, but this year the imports have increased by 24 lakhs of rupees. The idea that European imported liquors are a prophylactic for plague far superior to country liquors may account in part for this increase.

The increase in the import of oilseeds is growing yearly since 1904-05 when they were valued at 23 lakhs rising to 63 and 94 lakhs in the two succeeding years. This year the figures amounted to nearly 126 lakhs of rupees. The difference of 101½ lakhs in all kinds of railway materials is attributed to the doubling of the North-Western Railway now under contemplation.

Sugar refined has also increased by 60 thousand maunds in weight and by 9½ lakhs of rupees in value, due chiefly to the large imports from Karáchi, testifying to the influx of beet and cane sugar from foreign countries.

Violent fluctuations have occurred in the import of gold coin and silver bullion, but the slight increases under other heads call for no particular comment.

A most marked decrease was that in apparel, which has fallen off by about twenty thousand maunds in weight, with a drop of 41½ lakhs in value, whereas till this year the imports of apparel were leaping up year by year. The low value rate is also responsible for the decreased valuation this year. Cotton, raw, fell in value by 54½ lakhs owing to diminished imports from the United Provinces, Rájpútána and Central India, where the crop was poor.

The decrease in cotton yarn and piece-goods, Indian, has already been noticed.

Imports of hides and skins fell by 9 lakhs of rupees, due partly perhaps to the high rates charged for them by the North-Western Railway.

Exports.

129. The increase of about 48 lakhs in the value of cotton, raw, is due to the good crop of 1906 which was exported after ginning in the current year. As already noticed the chief increases are in the export of food stuffs. The value of wheat increased by 365¼ lakhs, of gram and pulse by 109 lakhs, and of wheat flour and other grains by 213 lakhs. The increase is doubtless due to the good harvest of rabi 1907 and the demand due to the prevalence of famine in the United Provinces. The high prices for food-grains are responsible for the swelling of the values.

A slight increase also occurred in the export of cotton piece-goods, Indian marble and stone, salt and timber unwrought. The increase of over 16 lakhs in the exports of railway materials, other sorts, is due to railway extensions in other provinces.

The largest decrease is one of 58 lakhs in the export of hides and skins which appears to be due to low prices prevailing at Karáchi, coupled with the rise in freights charged on hides and skins. In this connection the Manager of the North-Western Railway was addressed by the Secretary to the Punjab Chamber of Commerce, and has replied that the question will be considered this year. At the same time the North-Western Railway authorities consider that the falling-off in the trade in hides and skins is more properly due to the unfavourable rates offered by the merchants of Boston and Philadelphia, the two main emporia of this branch of the trade in hides. In Lahore and Amritsar certain godowns are said to be full of hides, and the moment a favourable rate is offered by American traders the traffic with Karáchi is expected to revive. There is, however, reason to fear that the increased North-Western Railway rates may tend to dislocate the Punjab trade. The falling-off in the exports of hides amounted to 50 per cent., while whole skins fell off by 30 per cent. The slack trade in Amritsar shawls may in part account for the drop of over 10 lakhs of rupees in woollen manufactures.

Under silver coin there was a decrease of 89 lakhs and over, due probably to an increase in hoarding. The small variations in other articles call for no remarks.

Distribution of the trade.

130. The largest share, both of imports and exports, continues to be taken by Karáchi through which port the majority of the Punjab trade passes. The United Provinces, Bombay and Calcutta are the chief competitors of Karáchi.

The following table shows the main centres, and the percentages of the rail and river borne trade of the Punjab with those centres, calculated on the values of imports and exports :—

Trade Centres.	Imports.		Exports.	
	1906-07.	1907-08.	1906-07.	1907-08.
Karáchi	40·02	41·38	41·40	42·99
Bombay Port	13·57	16·12	9·62	7·39
United Provinces	25·51	20·23	20·43	31·97
Calcutta	8·45	9·24	8·39	5·25

From the above it will be seen that Karáchi still continues to improve her position, especially as regards exports. The total sea-borne trade of Karáchi this year reached a value of Rs. 38,86,79,799 in all.

TRADE WITH TRANS-FRONTIER COUNTRIES.

131. The year has been one of change and confusion in the registration of trade. The returns for this year do not show the traffic by routes separately, as the registration by routes was introduced only from the middle of the year and the figures are unreliable. The trade with Ladákh is registered at Sultánpur (Kulu), but has in many cases been confused with trade for Tibet. The confusion is increased by the frequent use of Tibet for Little Tibet or Baltistán. General.

132. Subject to the elements of error noted, the imports from Ladákh amount to 2,565 maunds of a value of Rs. 2,93,125 as compared with 6,401 maunds valued at Rs. 6,13,029 last year. In reality there has not been much decrease, and the variations are due chiefly to statistical changes. The imports of borax and raw wool have been shown under Tibet, and they account for about 3,000 maunds and Rs. 64,000 out of the decrease. There has been an increase of some 400 maunds in the imports of *charas*, but the valuation has this year been based on the price, less duty, and this accounts for a decrease of nearly 3 lakhs of rupees. Growth of trade.

The exports to Ladákh have been 4,116 maunds valued at Rs. 1,28,821 as compared with 5,876 maunds valued at Rs. 1,53,522 last year.

The imports from Tibet are 8,404 maunds valued at Rs. 2,10,899, compared with 4,679 maunds valued at Rs. 1,06,701 in 1906-07. The exports are 1,296 maunds, value Rs. 28,464, compared with 1,001 maunds, value Rs. 42,404. The trade in brass and copper, which was formerly considerable, has almost disappeared.

The incompleteness of the statistics forbids any appreciation of the Afghanistán trade.

JOINT STOCK COMPANIES.

133. The number of companies with share capital has risen from 87 to 96. Sixteen new companies were registered and seven became defunct during the year. Four of the new companies belong to Multán. Number of companies.

The registration of one company had to be refused, as one of its objects was the execution of a secret agreement, and section 8 of the Act does not permit of the concealment of the real objects of a company.

134. The nominal capital of all companies has risen from 285 to 336 lakhs of rupees, and the paid-up capital from 116 lakhs to 139 lakhs. The largest increase in nominal capital is that of the Bharat Insurance Company (5 lakhs). Capital.

34. Public Works.

135. The total outlay for the year amounted to Rs. 68,65,279 under the following main heads:—

	Rs.
Imperial Military Works	3,77,449
Imperial Civil Works	11,59,945
Provincial Works	43,29,988
Incorporated Local Works	3,20,942
Contribution Works (including local loans)	6,76,955
	68,65,279

These figures exclude a sum of Rs. 8,613 expended by this Department on famine relief works, and Rs. 9,456 expended by district officers on

acquisition of land for the Southern Punjab and Amritsar-Tarn Táran-Patti Railways ; also Rs. 9,396 on account of miscellaneous railway expenditure, representing establishment charges of the Railway Inspector, audited by the Examiner, Public Works Accounts, Punjab.

Famine relief works.

136. No famine relief works were undertaken, but, as there was a possibility of their being required in the Delhi and Ferozepore divisions, preliminary arrangements were made. About Rs. 4,000 were spent on purchase of tools and Rs. 12,212 on providing extra establishment and digging trial pits for preparation of relief work projects in the Hissar district.

Imperial military works.

137. The principal works carried out were in the Jhelum colony and the Lyallpur district, chiefly roads and buildings for the Army Remount Department.

Imperial civil works.

138. Alterations and improvements were carried out at Simla. The Accountant-General's office at Lahore was well advanced towards completion; at Kasauli two estates were purchased for the Pasteur and Research Institutes, and alterations made in a third.

Provincial works–Buildings.

139. A new tahsil was built at Sargodha, and a Naib Tahsildar's court at Nathána in the Ferozepore district. The Public Works Secretariat offices at Lahore were completed : Rs. 30,958 were spent on repairs to antiquities in Lahore and Delhi.

Additions were made to the Government College, Lahore, and the work of rebuilding Bishop Cotton School, Simla, was completed. A new court house was built for the District Judge at Gurdáspur ; electric fans were fitted in the District Court, Lahore ; the Sessions House at Lyallpur was completed; new District Jails at Lyallpur and Campbellpur were completed ; Rs. 2,54,415 were spent on new police stations.

Residences were built at Delhi for the Settlement Officer, at Ambála for the Deputy Inspector-General of Police, at Campbellpur for the Deputy Commissioner's Head Clerk, at Ráwalpindi for the Commissioner's Head Clerk, at Lyallpur for an Assistant Engineer. Work on the Agricultural College at Lyallpur was still in progress, about four-fifths having been completed ; other buildings in connection with the college were completed.

Roads.

140. The provincial outlay on works amounted to Rs. 3,74,074 and on repairs to Rs. 10,02,065. The decrease on works is due to half the outlay on new feeder roads having been debited against district funds according to the proposals made during the previous year. Good progress was made in carrying out the programme of new feeder roads prepared in 1906.

Miscellaneous public improvements.

141. Additions to the Lawrence and Montgomery Halls at Lahore were completed. The Ludhiána water-works were nearly completed. The water-supply scheme for the Agricultural College at Lyallpur was nearly completed. The conservancy tram-line at Lahore was completed, and drainage schemes in Lahore, Amritsar and Multán were completed.

RAILWAYS.

North-Western Railway.

142. The following surveys were completed on the 5′ 6″ gauge :—

(1) The Jullundur Doab group railways comprising a line from Hoshiárpur *viá* Jullundur, Kapurthala, Sultánpur, Núrmahal, Phagwára to Nawashahr, with branches to Garhshankar and Ráhon, 124·27 miles.

(2) From Patti to Kasúr, 27·46 miles.

(3) For doubling the line between Amritsar and Sahàranpur excluding the Beas, Sutlej and Jumna bridges, 195·55 miles.

(4) From Dhak to Katha, 11·04 miles.

(5) On the 2′ 6″ gauge, for an extension of the Kálka-Simla Railway from its present terminus at Simla to the old bullock train offices, about ½ a mile.

The following surveys were in progress :—

(1) From Kasúr *viâ* Haveli and Pákpattan to Lodhrán, 210 miles on the 5′ 6″ gauge.

(2) From Mundra to Basal, 100 miles, on the 2′ 6″ gauge.

Discontent found to be prevailing among the employés was removed without inconvenience to the public.

The following important works were completed :—the doubling of the line from Samasata to Rohri, 208 miles, and the renewal and doubling of weak plate-girders on this length ; the conversion from the 2′ 6″ to the 5′ 6″ gauge of the Khushálgarh-Kohát section of the Khushálgarh-Kohát-Thal Railway, 30·25 miles ; and the construction of the second wing of the new central offices at Lahore, of the new engine-erecting shops at Lahore, and of the new bridge over the Indus at Khushálgarh.

There were four serious train accidents during the year.

A length of 55·57 miles from Sangla Hill to Shahdára (near Lahore) was added during the year.

The number of passengers carried was 39,910,000 compared with 33,588,000 in the previous year and the net earnings rose to Rs. 3,74,52,000. The percentage of working expenses to gross earnings showed a slight fall to 51·90 per cent. 8,464,000 tons of goods were carried.

Tramways.

143. On the 3rd June 1908 the Delhi electric tramways were opened, and are now in good working order. They are worked on the overhead wire system.

35. Irrigation.

General.

144. The direct receipts of the Irrigation Department during 1907-08 were Rs. 1,88,10,201, and the direct expenditure Rs. 1,21,41,108, the latter being divided into capital Rs. 45,79,473 and working expenses Rs. 75,61,635. In addition to direct receipts, the indirect revenue credited to the canals on account of enhanced land revenue, &c., was Rs. 32,37,044. Compared with 1906-07 the net profit during the year shows a falling-off of Rs. 21,07,876.

The main causes of this falling-off are :—General reduction of irrigation due to partial failure of the monsoon and the low supplies obtaining in the rivers during the rabi season ; heavy special remissions on the Lower Chenab and Upper Bari Doab Canals of charges on wheat and gram crops ruined by untimely rains at the end of the rabi season. Plague also seriously hampered improvement of irrigation on the Lower Jhelum Canal.

The total area irrigated was 6,039,944 acres compared with 6,642,365, the average of the three years ending 1906-07. Matters of interest relating to the different canals are noticed below.

Western Jumna Canal.

145. The canal ran throughout the year except for six days in April 1907. The total rainfall in the circle was below that recorded in the previous year, the monsoon having failed almost entirely. The area irrigated was 753,355 acres, which is 64,000 acres less than the maximum area proposed to be irrigated by this canal. The decrease is due to the exceptionally low river. The net income of the year was Rs. 20,18,863, equivalent to 11·63 per cent. on the capital outlay.

Sirhind Canal.

146. The rains began very late in July, and were local and fitful in character. They lasted little more than one month altogether, and stopped on the 20th August. The total area irrigated was 1,189,243 acres, which is 0·49 in excess of the area irrigable by design (1,183,442 acres). The profit earned on the British branches was Rs. 21,17,439, equivalent to 8·47 per cent. on capital invested.

Upper Bari Doab Canal.

147. The mean rainfall was much below the average, especially in Gurdáspur district, where it was only 17·31 as compared with an average of 31·37. The system of irrigation in the Lahore and Amritsar districts has been receiving considerable attention, and large estimates are in hand for remodelling the system round Lahore. The banks of the Lahore branch have been raised almost throughout, and in some lengths by as much as four or five feet.

Considerable sums were spent on machinery and stock for the Canal Central Workshops, where an expansion of the works has necessitated an increase of establishment. The net income of the year amounted to Rs. 21,43,198, yielding 10·40 per cent. on capital.

Lower Chenab Canal.

148. The year generally was a dry one, and rainfall was not evenly distributed. The total net area of land allotted at the end of March 1908 was 1,828,727 acres, which shows an increase of only 6,283 acres. The area shown as irrigated is 1,705,296 acres. The net revenue of the year amounted to Rs. 51,15,602, equivalent to a percentage of 18·15 on the capital invested (Rs. 2,81,81,632) to the end of the year. In the previous year the figures were Rs. 68,00,588 and 24·09 respectively.

Lower Jhelum Canal.

149. The mean rainfall was less than the average. No rain whatever fell in September, and consequently the demand for canal water to mature the autumn crop was intense. The area allotted in the colony up to the end of 1907-08 is 341,085 acres. The net area irrigated by the whole canal was 543,529 acres. The net revenue amounted to Rs. 9,11,022, which represents 5·74 per cent. on the capital outlay. The net revenue exceeded the interest charges for the year by Rs. 3,88,691, which is equivalent to 2·45 per cent. of the capital outlay.

Upper Chenab Canal.

150. Work was in progress on this new major work. The year was one of drought, which helped very much the works in hand, and the manufacture of materials. The total expenditure during the year was Rs. 41,23,592.

Upper Jhelum Canal.

151. Work was in progress, and the total expenditure amounted to Rs. 28,32,180.

Lower Bari Doab Canal.

152. On this new major work a total expenditure was incurred of Rs. 6,18,587. A considerable amount of survey work was done in connection with the site for the Ravi Syphon.

Upper Sutlej Inundation Canals.

153. The year's operations resulted in a profit of Rs. 3,37,451, equivalent to 19·25 per cent. on capital outlay. The area irrigated was 193,853 acres, a large decrease due to much lower supplies in the river, and also to the new system of granting remissions by reduction of area instead of change of class.

Sidhnai Canal.

154. The Sidhnai and its subsidiary canals were in flow 142 days in this year and irrigated 88,841 acres as compared with 183,276, the average of the previous three years.

Indus Inundation Canals.

155. Owing to the abnormally low supply in the river, the area irrigated was only 133,753 acres, compared with 197,110, the average of the previous three years, and the net profit of the year was only Rs. 56,152, equivalent to 2·44 per cent. on capital outlay.

Minor Irrigation Works.

156. On the *Lower Sutlej Inundation Canals* the river did not rise very high, and in consequence a large area of the autumn crop remained unmatured; so the total area matured was only 134,793 acres out of 207,209 watered. The *Chenab Inundation Canals* watered only 1,10,699 acres, but showed the large profit of Rs. 1,79,176 against Rs. 1,04,326 in the preceding year. The increase in profit is due to the satisfactory working of the canals and reduced expenditure. The *Shahpur Imperial and Provincial Canals* irrigated respectively 17,435 and 14,875 acres, much less than the average. Owing to the severe epidemic of plague, which did not abate till May, the cultivators were unable to reap the spring crops at the proper time, with the result that autumn sowings were restricted. The river subsided early. There was a large decrease in irrigation on the *Muzaffargarh Inundation Canals* owing to the unfavourable character of the year, and the same was the case on the *Ghaggar Inundation Canals*. The irrigation on the *Rangoi Canal* was only 1,456 acres, and the Ravi Inundation Canals only 10,846 acres owing to low supplies.

CHAPTER V.

REVENUE AND FINANCE.

[Detailed information on the subject dealt with in this chapter will be found in the following publications :—

(*a*)—Departmental Reports.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1907.

Canal Revenue.—Revenue Report of the Irrigation Department, Punjab, for the year 1907-08.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1907-08.

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1907-08.

Stamps.—Report on the Administration of the Stamp Department of the Punjab for 1905-06 to 1907-08.

Income Tax.—Punjab Income Tax Report for 1905—08.

Forests.—Progress Report on Forest Administration in the Punjab for 1907-08.

Local Funds.—Review of the Accounts and Administration of District Boards in the Punjab for the year 1907-08.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1907-08.

(*b*)—Statistics of British India, Part IV (*b*)—Finance (First issue).

Salt.—Tables 5, 6, 7, 13 and 14.

Stamps.—Tables 5, 23, 24 and 25.

Excise.—Tables 1-A to 5 and table 12.

Income Tax.—Tables 2, 3, 10 and 11.]

36. Gross Revenue and Expenditure.

157. In the following statements for the year ending March 31st, 1908, the income and expenditure of the Railways, Post Office and Telegraph Departments and Military expenditure and Capital expenditure on Canals are omitted. General.

158. The revenue raised in the Province during 1907-08 is made up as follows, last year's figures being quoted for comparison :— Revenue.

Sources of revenue.	1906-07.	1907-08.
	Lakhs of rupees.	
Land Revenue ...	2,48·76*	2,27·88
Irrigation ...	2,43·46	2,20·14
Salt ...	41·40	33·87
Local Rates ...	27·03	25·45
Stamps ...	40·48	42·79
Excise and Opium ...	40·73	42·98
Income Tax ...	13·32	13·70
Forests ...	16·05	14·57
Police ...	6·86	6·46
Civil Works ...	8·48	8·69
Interest ...	3·67	3·34
Law and Justice ...	3·60	3·35
Tribute ...	2·77	2·76
Registration ...	2·73	2·77
Jails ...	1·94	1·83
Education ...	3·78	4·56
All other items ...	10·27	11·00
Total receipts ...	7,15·33	6,66·14

* Excludes Rs. 23,09,000 on account of land revenue due to canals now shown against the head "Irrigation."

Chapter V. REVENUE AND FINANCE.

Expenditure.

159. The expenditure, excluding expenditure of the Military, Railways, Post Office and Telegraph Departments, Municipal expenditure and Capital expenditure on Canals, amounted to Rs. 4,47·75 lakhs in 1907-08. The detailed items, with corresponding figures for the previous year, are given below :—

DEPARTMENTS.	1906-07.	1907-08.
	Lakhs of rupees.	
Irrigation	80·27	82·74
Public Works	74·40	81·35
Land Revenue	47·03	47·91
Police	47·08	52·67
Law and Justice	38·59	37·24
Medical	16·78	19·28
Education	27·57	29·18
General Administration	14·40	14·98
Superannuation Allowances and Pensions	14·93	15·67
Jails	10·53	10·31
Forests	11·44	11·77
Political	6·43	6·42
Stationery and Printing	6·23	6·93
Scientific and other Minor Departments	6·88	7·29
Salt	3·81	4·29
All other items	17·71	19·72
TOTAL EXPENDITURE ...	4,24·08	4,47·75

Abstract of Income and expenditure.

160. The following is an abstract of the gross income and expenditure for 1907-08 as recorded in the books of the Accountant-General, Punjab :—

	RECEIPTS.				EXPENDITURE.			
	Imperial.	Provincial.	Local.	Total.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue and expenditure.	1,73,77,972	2,97,41,822	37,27,954	5,08,47,748	22,93,576	3,05,29,239	45,22,620	3,73,45,435
Contributions	...	1,46,496	5,31,542	6,78,038	...	5,31,542	1,46,496	6,78,038
Debt and remittance heads.	...	...	...	33,78,61,090	...	...	...	34,33,71,396
Total ...	1,73,77,972	2,98,88,318	42,59,496	38,93,86,876	22,93,576	3,10,60,781	46,69,116	38,13,94,869
Opening balance.	...	...	...	66,70,584	Closing	balance	...	1,46,62,591
GRAND TOTAL	...	...	...	39,60,57,460	...	...	...	39,60,57,460

37. Land Revenue.

161. The land revenue collections for the year ending 30th September 1907 have been reviewed in Chapter II. The total collections amounted to Rs. 2,00,00,794 fixed, Rs. 46,12,050 fluctuating and Rs. 13,29,961 miscellaneous land revenue.

38. Irrigation.

162. The total capital invested up to the end of 1907-08 amounted to 1,123·8 lakhs, of which 12·7 lakhs were invested in the current year. The income from all sources was 202·8 lakhs which, after deducting working expenses and interest charges, gives a net profit of 94·2 lakhs as compared with 115·3 lakhs in the previous year and 79·2 lakhs in 1905-06. The main causes of the falling-off as compared with last year are the general reduction of irrigation due to partial failure of the monsoon and the low supplies obtaining in the rivers during the rabi season; heavy remissions on the Lower Chenab and Upper Bári Doáb Canals of charges on wheat and gram crops ruined by untimely rain; and to plague which hampered improvements on the Lower Jhelum Canal. The condition of the Irrigation Department has been already discussed in Chapter IV.

39. Opium and Excise Revenue.

163. The income of the province from excise which has been markedly rising for many years past has continued to increase during the year under report, being now 42 lakhs against an income in 1901-02 of barely 25 lakhs. The increase has taken place under all heads; the income from liquor having risen from 16 lakhs to nearly 29, that under opium from 6 lakhs to close on 8, and that under drugs from nearly 3 lakhs to 5½. The increase in income has not, except in the case of drugs, been caused to any appreciable extent by increase in duty, and except under the head of drugs the increase in income is the outcome of a corresponding increase in consumption. That the increase in consumption is not due to increased facilities for obtaining excised material is indicated by the fact that since 1901-02 the number of retail licenses for country liquor has fallen from 1,250 to 947, that of licenses for opium and *post* from 1,456 to 981, and that of those for drugs from 1,250 to 708. There is now but one retail liquor shop for 21,000 persons against one for 16,000 in 1901-02, one retail opium shop for 21,000 persons as against one for 14,000 in 1901-02 and one retail drug shop for 29,000 persons as against one for 16,000 in 1901-02. The causes for the increase in consumption must be sought in other directions, and possibly the belief that spirit is a good prophylactic against plague may have led to more drinking, but there can be little doubt that the most potent factor in the increase is the marked advance in the prosperity of the province generally and more especially the extraordinary rise in wages which has characterized the history of the last few years in the Punjab.

164. The whole of the arrangements relating to excise on liquor are at present under revision in consequence of the recommendations of the Excise Committee of 1906.

165. The experiment introduced on 1st April 1905 in the rural areas of the four central Sikh districts with a view to combating illicit distillation by licensing shops on fixed fees instead of by auction was continued during the year, but the price per bottle was raised from 12 to 14 annas. This rise has led to a decrease of consumption in two of the four districts affected, but the general result of the experiment has been to increase the sales in the areas concerned at a considerably greater rate than the increase experienced in the province at large, and it is still a matter of uncertainty how far the increase is due to the substitution of illicit for licit consumption. It has after careful consideration been decided to continue the experiment until the 31st March 1910, subject to certain modifications in the direction of an increase of the still-head duty, the fixed vend fees and the selling price per bottle.

166. The administration of the Excise Department in respect of opium during the year 1907-08 has been marked by a rise in the sale prices of opium and a large decrease (from 1,200 to 947) in the number of licensed shops. Monopolies for vend have been broken up and the shops for the sale of opium have been separated from those for the sale of hemp drugs. Steps have moreover been taken to carry further the policy of substituting excise opium for other forms of consumption, as arrangements have been made for abolishing at an early date (except in certain small areas) the cultivation of the poppy for opium in the Punjab and for stopping the import of Malwa opium. These two measures will, it is hoped, be practically carried through before the end of the current financial year.

167. Afghánistán opium was for the first time imported into the Punjab during 1907-08. This is an important development of the opium trade. It is said to be of good quality and likely to take the place of Málwa opium in the public taste. The imposition of adequate taxation upon it is a matter of importance before the situation is complicated by the development of a large trade.

168. As in the case of opium, the number of shops for sale of drugs has been very largely reduced during the year and the separation of the two classes of shops has been effected with success. Consumption both of bhang and of charas has decreased, but a rise in the import duty on charas from Rs. 6 to Rs. 8 from 1st April 1907 has sufficed to cause a rise in income. The Excise Commissioner was able during the year under review to pay a visit to Leh, and his report on the circumstances of the charas trade at that place is now under the consideration of the Financial Commissioner.

169. Progress is being made in stopping the abuse of cocaine, which has not yet assumed alarming dimensions in this Province. Sellers of the drug are now required to take out licenses, and the illicit trade has been discouraged by detection and prosecution.

40. Salt Revenue.

170. The gross revenue of the Northern India Salt Revenue Department for 1907-08 was 112·44 lakhs or 33·1 lakhs less than in 1906-07. This was due to the reduction with effect from the 20th March 1907 in the rate of duty from Re. 1-8-0 to Re. 1 a maund. The sales of duty paid salt exceeded the sales in 1906-07 by 405,972 maunds. There can be no doubt that the consumers generally receive most of the benefit of every reduction made in the duty, shortly after it has been ordered. Thus at Lahore the retail price per British maund in 1906-07 was Rs. 2-2-10 and in 1907-08 was Re. 1-12-1, and similar reductions were recorded at other stations in the Punjab.

171. The sales during the year in the cis-Indus and Kálábágh Mines Division amounted to 3,079,147 maunds or 471,894 maunds in excess of 1906-07. Sales from the Mandi Mines also show an increase and those from the Sultánpur Salt Works in Gurgaon, though below those of last year, are still well above those of 1902-03.

41. Stamp Revenue.

172. The triennial report for the years 1905-06 to 1907-08 has this year been submitted. During this period, as compared with that preceding it, the sale of court-fee stamps has remained almost stationary after allowance has been made for certain legislation which temporarily reduced the institution of certain suits. On the other hand, the sale of non-judicial stamps has continued to increase annually showing increased commercial activity among the people, for under this category are included bills of exchange, foreign bills, etc. The monopoly which treasurers previously had in the sale of court-fee stamps has now been completely broken down. Increased attention is being paid to the taking of thumb impressions by vendors in their sale registers. These impressions are regarded as a check upon fraud; as all the stamp vend rules are at present under revision, it is probable that further measures will be taken to secure the record of accurate impressions; for the present those taken are, for the most part, valueless.

42. Assessed taxes.

173. A triennial report on the Income Tax Administration of the Punjab for the years 1905—08 has been made. The character of the triennium may be summed up as follows :—Two lean years and two with a heavy mortality from plague, but nevertheless a steady expansion on comparison with the preceding triennium in total realizations and a slightly rising incidence of taxation per assessee, unaccompanied by any marked increase in the number of objections made and penalties levied or in the amount of uncollected balances.

174. The general increase in the proceeds of the tax may be taken as a sign of increasing prosperity; a marked feature of it has been the great increase in the assessment of companies, the sum paid by them having in the last six years risen from Rs. 50,500 to Rs. 79,000. It is to be hoped that the dangers of company promoting may be avoided. Notwithstandig the increase, the collection of the tax probably still falls somewhat short of what might fairly be expected. The present total assessments amount to 13½ lakhs as against 13·25 lakhs in the previous year and 12·31 lakhs in 1905-06.

175. Expenditure on assessment and collection amounted to less than one per cent. on the collections, but no special assessing officers were entertained, and so an indefinite portion of the salaries of Deputy Commissioners and other assessing officers should really be added to this percentage.

A new Income Tax Manual is under preparation.

43. Forest Revenue.

[Forest revenue and expenditure have already been noticed in Chapter IV.]

44. Provincial Revenues.

176. The income and expenditure under the provincial section of accounts during the past year have been as follows :—

Year.	Opening balance.	Income.	Expenditure.	Closing balance.
	Rs.	Rs.	Rs.	Rs.
1905-06	79,94,387	2,73,08,306	3,01,04,358	51,98,335
1906-07	*60,67,740	3,11,94,277	3,18,55,491	54,06,526
1907-08	54,07,000	2,98 88,000	3,10,61,000	42,34,000

* The opening balance for 1906-07 differs from the closing balance on 31st March 1906 on account of the transfer of Rs. 8,69,405, the balance of the Patwari Fund, from Local to Provincial.

177. The figures for 1907-08 are not final, but are liable to correction in next year's Administration Report. The closing balance of the year 1907-08 included 14¾ lakhs out of the 20 lakhs contributed from Imperial Revenues for the extension and improvement of Simla. The noticeable features in the accounts of the year 1907-08 are (1) the establishment of an insurance fund to finance relief measures when famine is declared, the assets of which are Rs. 1,40,000 annually countributed by the Government of India; (2) the transfer of the Cantonment Magistrate's Department from the Civil to Military Department and the surrender by Provincial of Rs. 1,44,000 on the same account; (3) the imperial grants towards the scheme for the improvement of the pay and prospects of teachers in European Aided Schools, the establishment of a Training School at Sanáwar for male teachers and the revision of the instructional staff of the Aitchison (Chiefs') College, Lahore; (4) the waiving of recoveries from local bodies of the costs of local audit, for which a compensatory assignment has been made by Imperial to Provincial; and (5) the reduction of the rate of interest chargeable on capital expenditure incurred in England on Major Irrigation Works.

178. The revenue classed as Provincial consists of a share of the receipts of the general revenues, the principal heads of which, with the exception of Provincial rates, have been discussed above. Provincial rates on land include the local rate levied under the District Boards Act, 1883, which is noticed in the following section. The portion of the local rate, known as the famine cess, credited to Provincial revenues, was abolished with effect from April 1906, and was made good from Imperial. Under the current Provincial Settlement Provincial revenues receive three-eighths of the income from Imperial canals, subject to a guaranteed net income of $30\frac{3}{4}$ lakhs per annum.

45. Local Funds.

Balances.

179. The closing balance on the 31st March 1908 was Rs. 22,63,000 (deposits Rs. 37,000 and cash balance Rs. 22,26,000) against Rs. 23,66,000 in the previous year. The decrease is mainly due to the fuller utilization on neglected public works of the special annual assignment of $6\frac{1}{2}$ lakhs made by the Government of India since 1905-06. The system of limiting expenditure on plague incurred in a local area to the financial ability of each local body which has been in force since 1903-04 has proved beneficial. The arrangement sanctioned in Punjab Government letter No. 1419 S. (Financial), dated 18th July 1908, of permitting an overdraft by a district board when its collections of local rate are diminished by continued drought or other cause is also calculated to steady the resources of these bodies.

Audit.

180. The issue of an Account Code for district boards still hangs fire. Meanwhile the peripatetic audit system works smoothly.

Income and expenditure.

181. Excluding debt head transactions, the total income for the year amounted to 45·59 lakhs agaist 42·4 lakhs, and the expenditure to 47·75 lakhs against 38·9 lakhs in the previous year. The increase in income is under the head 'Contributions from Provincial to Local' and is due to the adjustment of a large assignment made by the Government of India. The increase in expenditure on Education of Rs. 1,82,000 shows the general attention which is being devoted to the fostering of primary education in rural areas. Expenditure on local fairs and public gardens has also increased and has given rise to a corresponding increase in income. A large increase of $6\frac{1}{2}$ lakhs in expenditure on civil works was due to the disbursement of accumulations of the annual assignment of $6\frac{1}{2}$ lakhs made by the Government of India. This expenditure was very largely in the Department of Public Works.

46. Municipal Funds.

Balances.

182. The balance of all the municipalities at the close of the year amounted to Rs. 17,36,000 in cash and Rs. 1,90,000 in investments. The balances of a few municipalities fell below the prescribed minimum of 10 per cent. of the receipts for the year, owing partly to heavy refunds of octroi collection and partly to larger expenditure on plague.

Income.

183. The income from octroi was 3·32 lakhs more than last year; this is due to a rise in values, to the revision of schedules and to the more efficient system of collection consequent on the adoption of the Municipal Account Code. The subject of octroi has been more fully treated in section 25 above. The income under "Grants and contributions for general and special purposes" diminished from 4·36 lakhs to 2·30 lakhs on account of certain special grants having been made last year.

Expenditure.

184. With effect from the year under review the fees for local audit have been remitted by the Government of India. Expenditure on "Public health and convenience" rose by 1·24 lakhs, and this is due in the main to progress made on the Ludhiána water-works, to increased attention to sanitation in large towns, and to expenditure on rat destruction, which last may have contributed to the comparative immunity from plague throughout the year. As in the case of 'Local Funds' there has also been a large increase of 1·45 lakhs in expenditure on public instruction. The financial position of each indebted municipality was satisfactory, the closing balances on 31st March 1908 having been above the minimum prescribed by Government.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

[Detailed information on the subjects dealt with in this chapter will be found in the following publications :—

Report on the Census of the Punjab and North-West Frontier, 1901, by H. A. Rose, I.C.S.

Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board and the Report on Sanitary Works for the year 1907.

Triennial Report on the working of the Charitable Dispensaries in the Punjab for the years 1905—1907.

Report on Vaccination in the Punjab for the year 1907-08.

Statistics of the Punjab Lunatic Asylum for the year 1907.

Report of the Chemical Examiner to Government, Punjab, for the year 1907.

Statistics of British India—

Part V.—Public Health (First Issue).

Statistics of British India—

Part IX.—Miscellaneous (Area, Population, Registration, Emigration, &c.) (First Issue.)]

47. Details of Census.

(See pages 153—60 of the Report for the year 1901-02 and the Report on the Census of the Punjab and North-West Frontier Province, 1901.)

48. Births and Deaths.

Birth-rate.

185. The slight decline in the birth-rate noted in last year's Administration Report has been accentuated, the rate for 1907 being 40·8 *per mille* as compared with 43·7 in 1906. Malarial fever in the autumn of 1906 is assigned as one of the causes of this. The rate, however, is considerably higher than that in the majority of other provinces.

Death-rate.

186. The death-rate (62·1 *per mille*) exceeded the birth-rate by no less than 21·3 *per mille*. The great increase in mortality was due entirely to plague. What effect the epidemic has had on the total death-rate in the province during the last 11 years can best be illustrated by the table below :—

Year.	Death-rate *per mille*, inclusive of plague.	Death-rate *per mille*, exclusive of plague.	Plague deaths *per mille*.
1897	31·05	30·97	·075
1898	31·05	30·95	·096
1899	29·57	29·55	·011
1900	*47·7	47·67	·024
1901	36·1	35·36	·735
1902	44·1	35·69	8·41
1903	49·0	38·8	10·2
1904	49·06	29·36	19·7
1905	47·55	30·90	16·6
1906	36·94	32·38	4·56
1907	62·1	31·8	30·3

* The figure is 43·9 if calculated on the population as shown in the Census of 1901.

It is clear that apart from plague the registered death-rate was normal, and though in a bad plague year the reporting service is so disorganized that accurrate returns cannot be expected, there is nothing in the character of the year generally to cast serious doubt on the figures.

187. The attitude of the people towards plague continues much the same; while enduring it with fortitude they have not shown any willingness to avail themselves of inoculation or to practice evacuation on any considerable scale.

188. As regards action by Government the chief steps taken have been to increase largely the number of the non-official plague workers and to make liberal provision for rewarding them; to provide all plague officers with equipment for general medical practice, in order that they may find it easier to win the sympathy of the people; and to provide grants on a liberal scale in order that district officers may be able to provide the means of evacuation where required, engage guards on abandoned houses, and reward freely villages which adopt precautionary measures. Rat killing is pursued vigorously, but no attempt is now made to carry out ratting operations over large areas. Towns and villages which are believed to be dangerous receive the first attention, and special measures are taken in healthy villages adjacent to infected areas in order to prevent the spread of infection.

189. Owing to the ravages of plague the death-rate in the Punjab was 18·6 *per mille* higher than that in any other province in India.

49. Emigration and Immigration.

[There is nothing to report under this heading.]

50. Medical Relief.

New dispensaries.

190. The total number of hospitals and dispensaries is now 425 as compared with 414 last year and 371 at the end of the last triennium.

Patients.

191. During the triennium under report the average number of indoor and out-door patients has increased, but not to a remarkable degree. As regards individual dispensaries, the attendance depends on local conditions, such as density of population, salubrity of locality and chiefly, perhaps, on the popularity of the officer in charge. Something has been done towards providing a separate department for women and children and in a small proportion of places female hospital assistants or trained nurses have been provided. It is noticeable that women often consult a male doctor even where a female one is accessible.

192. The private aided dispensaries afford an increasing amount of relief to the people in a form which appears to be acceptable. The number of patients treated in them has risen from 135,155 in 1905 to 237,954 in 1907.

Leper Asylums.

193. The population of the leper asylums is much the same as in 1905. It is understood that at certain seasons the lepers move about the country a good deal in quest of charity, the existing law not authorizing their detention against their will.

Study.

194. A scheme has been approved by Government under which hospital assistants in charge of outlying dispensaries are being deputed to headquarters hospitals for a period of two months, to refresh their medical knowledge, provision has been made for the supply of sound medical literature to hospital assistants and the provincial medical library, established in 1906, contains an excellent collection of books of recognised merit which can be

obtained on loan by civil surgeons and assistant surgeons. Facilities are also provided for the medical education of women, but it is unlikely that much progress will be made until the women of the middle classes attain a freer social status.

195. Thirteen hundred and eight patients underwent anti-rabic treatment at the Pasteur Institute, Kasauli, during the year of the Institue ending 8th August 1907. Of the total number, 452 were Europeans and 856 natives. There were nine failures among native patients and one among European patients. Pasteur Institute.

196. The question of improving the pay of the subordinate staff has been under consideration for some time. Hitherto the rate of pay has been undoubtedly low, in view of the distasteful nature of the duties performed, and the necessity for securing as attendants men of good character, capable of taking an intelligent interest in their work. The Local Government has now sanctioned a considerable increase in the permanent establishment, with increased rates of pay; and it is hoped that the difficulty hitherto felt by the Superintendent in securing suitable men as attendants will disappear. Lunatic Asylum.

197. The only remarkable feature of the year's administration was an outbreak of cholera in November and from which twenty-six deaths occurred. The cause was probably the drinking of water from contaminated sources by inmates of the asylum who were incapable of discrimination. Steps are being taken to make this impossible in future.

198. There has been a decrease in the numbers of cases and articles submitted for analysis during the year. The former have fallen from 1,395 to 1,334 and the latter from 3,989 to 3,668. The ratio of detection has been satisfactory, amounting to 70·7 in human poisoning cases, 80·5 in cattle poisoning cases, 88·2 in 'blood' cases. As in previous years, arsenic and opium are the agents most frequently used in human poisoning, while arsenic also accounts for the greater proportion of cases of cattle poisoning. Chemical Examiner.

51. Sanitation.

199. The system of rewards for sanitary improvements in villages continues to be of little use in stimulating improvement, but in the Chenab Colony the system of grants-in-aid has made considerable progress. The number of villages which were awarded such grants (Rs. 1,000 each) was twenty, and in every case khillats and sanads were granted to the lambardars.

200. The public spirit displayed by well-to-do natives of the province, in constructing works of public utility during the year 1906-07, was most commendable, and a sum of Rs. 2,76,300 was spent in this way principally on resting places, tanks and wells.

201. Out of the grant of Rs. 30,000 sanctioned by Government for sanitary works in 1907-08, a sum of Rs. 10,800 was allotted to various municipalities.

202. There has been little improvement in the maintenance of completed drainage works, and a considerable amount of re-organisation of the scavenging and flushing establishments of municipalities appears to be necessary for the satisfactory working of the open system of drainage which has been generally adopted in the Punjab.

52. Vaccination.

203. The number of primary vaccinations again shows a decrease explainable by the prevalence of plague and by the low birth-rate, but there

has been an increase in the number of re-vaccinations. In vaccination, as in other matters, the women of the country are conservative and in many places still regard a visit to Mata Devi as more efficacious.

204. The most important event in the history of the triennium 1905-1908 has been the transfer of the control of the vaccinating staff from the Sanitary Commissioner to the local bodies by which the staff is paid. The transfer is not yet complete; when it is complete, the Sanitary Commissioner will remain as an advising and inspecting officer. There is reason to hope that this important step will not only eventually mean a real increase of local self-government, but may also be a measure to popularize vaccination.

CHAPTER VII.

INSTRUCTION.

[For detailed information see the Annual Report on Public Instruction in the Punjab for 1907-08 and Statistics of British India—Part VII—Educational, First Issue, and Part IX—Miscellaneous—First Issue (pages 77-79).]

53. General system of Public Instruction.

(See paragraphs 616-35 of the report of 1901-02.)

Public instruction.

54. Education.

General statistics.

205. Expenditure on education has increased by almost 4½ lakhs of rupees, 56½ lakhs being the gross total for the year under report. "Direct" expenditure, *i.e.*, on tuition, shows an increase of Rs. 2,84,954 in the case of public institutions. This is about the normal rate of expansion. Primary schools account for Rs. 1,13,484 of the increase, and High schools for boys Rs. 1,10,264. "Indirect" expenditure, which comprises charges for direction, inspection, building, furniture, scholarships, etc., increased by Rs. 1,54,282, of which more than half was on buildings.

206. The number of public institutions in existence during 1907-08 was 4,313, with 244,271 pupils, and the number of private institutions was 3,313, with 58,592 pupils. In the former 2,331 attended Arts or Professional Colleges, 70,553 attended Secondary and 167,905 Primary schools. Training and special schools accounted for 3,482 students. Of the private institutions, the advanced schools were attended by 4,215 pupils and the elementary by 54,377. The figures now show that 23·22 of all towns and villages are provided with schools, and that 10·62 per cent. of the male population and 2·56 of the female population of the school-going age are receiving instruction.

207. The increase in the number of public institutions and scholars is almost entirely due to the opening of Primary schools for both sexes, 239 new ones being added this year. The outstanding feature of past years has been the great rise in the number of Primary schools, but owing to the circumstances of the year, progress in this direction has recently been less rapid.

General progress.

208. The year has been one of steady, but not sensational, development. Among the salient features may be noted the growing desire for scientific and technical education; the improvement in the staff and equipment of colleges, partly due to the pressure now exercised by the University; the increasing preference of Anglo-Vernacular to Vernacular Secondary education; the opening of 192 new Primary schools for boys and 44 for girls; and the wider introduction of the new rural school curriculum. The pressing educational needs include new buildings for many of the Government High schools, boarding-houses for Secondary schools generally, and qualified teachers for Primary schools.

Primary education.

209. The number of schools rose from 3,151 to 3,343, of which 2,476 were Government and Board schools. The increase was virtually confined to the latter class of schools, a rise in aided schools being balanced by a fall in unaided. The rate of progress in opening new Board schools has not been equal to that of preceding years; but in view of the cost of maintaining the new schools opened with the aid of the grant from Imperial funds, a slackening of speed was inevitable.

210. The number of pupils rose from 141,559 to 146,290, the increase being, as might be expected, in the Lower Primary stage. This increase has been almost entirely confined to the Delhi, Multan and Amritsar Circles; in Rawalpindi the number fell off by 2,580, which is attributed to the prevalence of plague. A satisfactory feature is the rise in the number of agriculturists' sons attending school, which is common to all the Circles.

211. The institution of rural schools has caused the disappearance of the Zamindari schools, which have proved a failure. The rural school is intended to be a compromise between the Zamindari and the Primary schools, the chief feature being the omission of Persian and the inclusion of the native system of accounts in the new course of study. This type of school is growing in favour and will probably be adopted shortly in all village schools. The growth of Indigenous schools is satisfactory: the number examined for grants shows an increase, but the attendance has fallen off, owing to plague and scarcity. Gurmukhi schools do not show any appreciable increase. The record for the year is, generally speaking, one of progress. The chief hindrances to the spread of Primary education are the want of funds, the scarcity of teachers, and the lethargy of the people.

Secondary education.

212. While the quality of the instruction is thought to be gradually improving, the development of Secondary education is not keeping pace with the extension of Primary schools, and there is a resulting want of teachers for the latter. The provincialization of the High schools at the head-quarters of districts has had a tonic effect on these institutions, and has rendered the teaching profession somewhat more popular. There has virtually been no change in the number of Secondary schools. The number of pupils in the Secondary stage of Anglo-Vernacular schools increased by 1,101, to which aided as well as Government and Board schools contributed. Vernacular schools show a satisfactory increase of 424, as compared with a decrease in the previous year. The number of pupils learning English in the Primary and Secondary departments of schools was 32,310, showing an increase of 1,232, which is significant of the popularity of this form of education. The demand for English shows no sign of abatement. The material proof of this is that the people are willing to pay for instruction in English: the fee-income in Anglo-Vernacular schools usually covers half the expenditure, which cannot be said of any other form of education; and Secondary schools started by private enterprise are invariably Anglo-Vernacular. Vernacular High schools, excluding the school attached to the Oriental College, are non-existent, and the only Vernacular Middle schools are those maintained by the District Boards. The objection to Anglo-Vernacular Middle schools, from an educational point of view, is that ill-taught English dominates the whole of the curriculum, the result being that the boys learn nothing thoroughly. In Vernacular schools the subjects of study receive their full share of time, and are not corrupted by the use of a foreign medium. An additional drawback is the expensiveness of an English school, where the fees are at least four times as high as those levied in Vernacular classes.

213. Most of the Government High schools as well as the Board Secondary schools are overcrowded and have long ceased to be sufficient to accommodate the increasing numbers. Much has been done in the way of equipping Government schools with furniture and apparatus, but Board schools are more or less defective in this respect.

The Punjab University.

214. The twenty-seventh Convocation of the University was held on the 21st December 1907, when the degree of Doctor of Laws was conferred on Sir Lewis Tupper, formerly Vice-Chancellor. The number of those admitted to the various degrees was 149, as compared with 163 in the previous year. The expenditure was Rs. 1,87,119, of which fees contributed Rs. 1,26,022, as compared with Rs. 1,21,775 previously. The closing balance was Rs. 1,18,897. All the affiliated colleges were, as before, visited and report-

ed on by an inspecting committee representing the University, and the affiliation of certain institutions in higher courses of study was decided on. Warnings were issued to two temporarily affiliated institutions. In January and February a course of lectures on Political Economy was delivered by Lala Manohar Lal, M.A., Principal of the Randhir College, Kapurthala, under the auspices of the University. The results of the various Arts examinations conducted by the University show a general improvement.

Arts Colleges.

215. The number of Arts Colleges is the same as that for 1907, *viz.*, 9 Arts (English) Colleges and 1 Oriental College with an attendance of 1,725 students. The number of candidates appearing in the several examinations was 1,242, with 547 passes, as compared with 1,023 candidates and 409 passes in 1906-07. The percentage of passes in the Intermediate, B. A. and M. A. Examinations were 45, 36·65 and 50, respectively, and in the Science Faculty in the Intermediate, B. Sc. and Master of Sc. Examinations they were 45, 27·77 and 75, respectively.

216. The expenditure during 1907-08 was Rs. 2,21,046 against Rs. 2,56,429 in 1906-07. To the total expenditure Provincial Revenues contributed Rs. 1,08,097, District and Municipal Funds Rs. 2,235, Fees Rs. 65,641, Subscriptions Rs. 858, and Endowments and other sources Rs. 44,215.

217. All the colleges are making noticeable progress. The closer supervision now exercised by the University through its inspecting committee has had a stimulating effect, and the college authorities, with the aid of the grant from Imperial funds which the University has been empowered to distribute, are endeavouring to fulfil the new conditions of efficiency.

Training Colleges.

218. The number of training institutions remained unchanged. The Central Training College and the Model School, Lahore, both show a satisfactory increase in the number of stipendiaries and students. The teaching staff in both is complete in all respects. The number of students in the Normal Schools has fallen off slightly. The supply of trained teachers was, as usual, unequal to the demand. The training classes for Europeans at Simla and Sanawar are progressing satisfactorily.

Special schools.

219. Special education is imparted in the institutions which prepare for the legal, medical and veterinary callings; in the engineering classes and the Mayo School of Art; in various schools which combine industrial with general teaching; and in the clerical and commercial classes which train for clerkships. In the Medical College and School, Lahore, and the Medical School for Women at Ludhiána the number on the rolls and the results in the various examinations are higher this year. The Veterinary College, the Government School of Engineering, and the Mayo School of Art, Lahore, are all making satisfactory progress. Admissions into the Engineering School had to be restricted: successful candidates found no difficulty in securing employment. The number of industrial and technical schools in the province has largely increased and they are reported to be doing good work, although the results in some are incommensurate with the expenditure.

Female education,

220. The number of schools has increased from 561 to 607 or over 8 per cent., and scholars from 21,769 to 23,588. The expenditure on the schools (European and Native) rose from Rs. 3,15,481 to Rs. 3,78,086.

221. There are many signs of progress. An increasing number of Christian girls are endeavouring to go beyond the Anglo-Vernacular High Standard, either joining the Forman Christian College, or the Women's College in Lucknow, or the Central Training College, and two have gone to England or

America from the Punjab to complete their education. The strongest and most important movement at present is that of the educated Hindu and Muhammadan classes, more especially those who have been in England, for the higher education of their daughters. It is to be hoped that the opening of the Victoria May Anglo-Vernacular School, which has been under discussion for two years, may provide for the educated classes of all religions an Anglo-Vernacular education of the best kind. Primary education in Gurmukhi makes progress; new schools are opened, and the existing schools increase in numbers. In most of the large towns a very considerable proportion of Hindu little girls are learning to read and write their mother-tongue. Muhammadan education has greater difficulties to contend with, since Urdu, which is taught in Muhammadan schools, is neither the mother-tongue nor the language of the religious books. The two great inducements which favour the learning of Gurmukhi are therefore wanting in Urdu schools, and these are usually thinly attended. A series of Gurmukhi Readers for girls' schools is in course of publication, which will supply the deficiency of moral and domestic instruction in the existing Readers. The Inspectors agree that popular prejudice against female education is lessening, and that the dearth of qualified teachers is now the chief obstacle to development. It is noted, however, that most of the Board schools are housed in rented buildings which are ill-ventilated and otherwise unsuitable, and that there is no provision for physical exercise.

European education.

222. The number of schools has decreased slightly. The expenditure on these schools, especially from Provincial Revenues, has risen considerably during the past few years, and the Government of India grant of Rs. 27,000, supplemented by special maintenance grants from Provincial Funds, and large sums spent on buildings, have together failed to suffice for the needs. It has been represented that the only solution of the problem, if there is not to be an increasing and indefinite drain of public money, lies in restricting the number of aided schools by amalgamation wherever this is possible. Such amalgamation has already been proposed in the case of the Lahore schools. The institution of the training classes at Simla and Sanawar is expected to be of great help in staffing the schools, and the Inspector thinks that the higher qualifications of the teachers already available have raised the standard of education.

Muhammadans.

223. The advance made by the Muhammadan community in education continues to be steady. The efforts of Government are being appreciated and private societies are doing much to promote education in the way of founding schools and scholarships. There has been a noticeable increase in the number of Muhammadan girls attending schools.

Education in Native States.

224. There are now five Arts colleges and 935 schools of various types in Native States. Of the schools, 301 are Primary and 576 are Indigenous (45 of which are advanced schools, teaching Arabic, Persian and Sanskrit). The number of scholars in attendance was 29,051, of whom 8,474 were at Indigenous schools. Compared with the preceding year, there was an increase of 1 Arts college, one Anglo-Vernacular Secondary school, thirty-three Primary schools, and the same number of Elementary Indigenous schools. There was an increase of 36 students in colleges, 704 in Secondary schools, 1,128 in Primary schools and 1,341 in Indigenous schools.

225. Education is still backward in these States as compared with British territory, but some progress is being made. Several of the Secondary schools in Kapurthala, Nabha and other States were visited by the Circle Inspectors, whose reports point to the want of trained teachers and intelligent teaching as being the principal defect. This want is not likely to be remedied until the States take to sending their teachers to the provincial training insti-

tutions. The Inspector of the Lahore Circle reports that there is a general and growing desire for education in the Simla Hill States, which are gradually coming under the influence of the Department.

Boarding-houses.

226. There were 288 boarding-houses for boys or college students, with 12,769 inmates, as compared with 278 and 11,969 in the previous year. The majority of the Secondary schools have boarding quarters of some sort attached. Boarding-houses for girls are the same in number (31), but with fewer inmates. The expenditure on boarding-houses of all kinds amounted to Rs. 5,21,611 or about 9 per cent. of the total expenditure on education. This sum includes the Imperial grant of Rs. 52,981 made on account of the Lawrence Military Asylum, Sanáwar.

55. Literature and the Press.

Literature.

227. The total number of publications received for registration has again fallen, the number in 1907 being 1,204 as against 1,772 in 1906. Of those registered, 491 were in Urdu, 328 in Punjabi, 129 bi-lingual and 90 in English, while, as to subject, poetry and religion absorb the greater part of the attention of writers. The new spirit is everywhere evident; in religious works it appears either in the reconstruction of doctrines or in the attempt to divest old dogmas and doctrines of that which is superfluous and incidental and to return to original sources; in social and political works it appears in the criticism of existing institutions such as caste and in the interest taken in affairs beyond India.

Thus, on the one hand, there is the "Veda Tattawa Parkash" which seeks to show that the Vedas inculcate devotion to one God only and that the gods and goddesses met with in Hindu scriptures are of later growth and, on the other hand, there is the "Jang-i-Rus wa Japan", a dignified metrical account of the Russian-Japanese war, and a translation of Lord Milner's "Egypt and England."

The Punjab Book Society continues to render services to Urdu literature by issuing translations of useful European works.

Newspapers.

228. There were 271 newspapers published during the year. Of these, 47 were published in English, 1 in English and Urdu, 192 in Urdu, 1 in Urdu and Persian, 2 in Urdu and Hindi, 13 in Hindi and 15 in Gurmukhi (Punjabi). Five English and 55 Vernacular newspapers were started and 14 English and 67 Vernacular ceased to exist during the year, leaving a total of 190 on the register. One paper was published quarterly, 121 monthly, 36 twice a month, 2 thrice a month, 99 weekly, 4 twice a week and 1 thrice a week. There were 7 daily papers.

56. Literary Societies.

[See report for 1901-02. The subject will not be dealt with again till 1911-12.]

57. Arts and Sciences.

Lahore Museum.

229. The Museum continues to be a popular institution, and though only 276,941 men as against 314,548 visited it during the year, the number of female visitors on the zenana days increased to 4,600.

230. The department of the Museum devoted to industrial Art productions has been augmented by a very fine collection of embroideries known as Chamba "rumals." In the Archæological department, as a result of Dr. Stein's explorations on the site of ancient Khotan in Chinese Turkistan, 203 articles of wood, terra cotta, glass, metal and cloth and several interesting minute seals have been added to the collection, while owing to the re-organisation of the Delhi Municipal Museum and its transfer to the Fort the whole of the Græco-Buddhist sculptures in that Museum have been removed to Lahore.

CHAPTER VIII.

ARCHÆOLOGY.

[Detailed information on the subject of this chapter will be found in the following publications:—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for 1907-08; Annual Progress Report of the Superintendent of the Archæological Survey, Northern Circle, for the year ending 31st March 1908.]

58. Archæology.

231. The attention of the Superintendent has been directed more to the United Provinces than to the Punjab, especially as, owing to famine, extensive excavations were made as a relief work at the ancient site of Sahet-Mahet (Gonda and Bahraich districts).

232. The only special works of preservation undertaken in the Punjab were those on some monuments in Kángra which had been damaged in the earthquake of April 1905. The total expenditure by the Public Works Department was Rs. 30,958, and the principal works completed were the restoration of the red sand-stone panels of the gateway between Jehangir's tomb and Akbari serai at Lahore and the provision of a water-supply for the newly laid out grounds in front of Jehangir's tomb. No epigraphical discoveries have been made during the year in the Punjab except a few in Chamba State, which proves an inexhaustible mine of inscriptions, a book on which is almost ready for the press. A number of articles of antiquarian interest including two Tibetan paintings from Ladákh have been added to the collection in the Lahore Museum.

CHAPTER IX.

MISCELLANEOUS.

59. Ecclesiastical Jurisdiction.

[See page 189 of the report for the year 1901-02. The Bishop also exercises ecclesiastical jurisdiction in the Persian Gulf.]

60. Ecclesiastical.

233. The various ecclesiastical institutions were noticed in the report for the year 1901-02. During the year under report the new Scottish church at Sialkot was completed and a grant-in-aid of Rs. 4,370 was given by the Government of India towards the construction of the new Wesleyan church at the same station. A proposal for building a new Anglican church at Dalhousie is under the consideration of Government.

61. Stationery.

234. The Punjab Administration draws its supply of stationery from the Calcutta stores. The value of stationery issued to officers in the Punjab during the year aggregated Rs. 2,40,742 as against Rs. 1,80,910 in the previous year. The details are as follows :—Cost of printing paper Rs. 1,07,118, office stationery Rs. 1,32,475 and padlocks Rs. 1,149 against Rs. 44,512, Rs. 1,35,363 and Rs. 1,251, respectively, last year.

62. Punjab Government Press.

235. The following statement compares the income and expenditure with the value of work turned out during the years 1906-07 and 1907-08 :—

Income.		Expenditure.		Value of work.	
1906-07.	1907-08.	1906-07.	1907-08.	1906-07.	1907-08.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
17,339	19,988	1,34,306	1,46,358	1,23,376	1,37,998

The income of the Press during the year under report was Rs. 19,988 as against Rs. 17,339 in the previous year. The total expenditure amounted to Rs. 1,46,358 against Rs. 1,34,306 in 1906-07. The cost of work done by the Contractors for Government Printing for departments and offices during 1907-08 was Rs. 74,145 as against Rs. 44,785.